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Effects of Perceived Individualism-Collectivism and Self-Consciousness on the
Self-Disclosure in Social Networking Sites

Hongliang Chen

B.A, China Agricultural University

University of Connecticut

A Thesis

Submitted Partial Fulfillment of the

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Master

At the

University of Connecticut

2013

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APPROVAL PAGE

Master Thesis

Effects of Perceived Individualism-Collectivism and Self-Consciousness on the
Self-Disclosure in Social Networking Sites

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Effects of Perceived Individualism-Collectivism and Self-Consciousness on the
Self-Disclosure in Social Networking Sites

Hongliang Chen

University of Connecticut, 2013

The purpose of this thesis is to examine the effects of perceived individualism-collectivism and self-consciousness on the self-disclosure in social network sites (SNSs). While controlling the effects of self-esteem and gender, we proposed three hypothesized models: (1) Effects of horizontal individualism, vertical individualism, horizontal collectivism and vertical collectivism on self-disclosure in SNSs; (2) Effects of private self-consciousness, public self-consciousness and social anxiety on self-disclosure in SNSs; (3) Effects of horizontal individualism, vertical individualism, horizontal collectivism and vertical collectivism on private self-consciousness, public self-consciousness, and social anxiety. A total of 212 Chinese undergraduate students and 368 American undergraduate students participated in this survey research. Chinese participants reported higher score of horizontal collectivism and vertical collectivism and there was no significant difference in perceived horizontal individualism and vertical individualism between Chinese and American respondents. This research generally supported the hypotheses proposed. We found that horizontal and vertical individualism-collectivism had different effects on self-disclosure in SNSs and the three dimensions of self-consciousness also differed in the prediction on self-disclosure.

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Chapter 1: Introduction

With the development of information and communication technologies in recent years, the ways individuals contact each other have been transformed by means of computer-mediated media. Computer-mediated communication (CMC) is a comprehensive term, which refers to human communication via computers (Simpson, 2002). A distinction can be made between synchronous CMC, where information senders and receivers exchange information in real time, and asynchronous CMC, where participants do not interact simultaneously (Simpson, 2002). Synchronous CMC includes various types of text-based online chat, computer, audio, and video conferencing; asynchronous CMC encompasses email, discussion forums, and mailing lists. In this study, we focus on the self-disclosure in social networking sites.

Researchers in this field are particularly interested in how individuals in CMC reveal information and how the interpersonal relationships develop online without the presence of social cues. Physical appearance, voice, gesture and apparels are not available in most CMC conditions, which might make it difficult for individuals to develop the relationships relying on language and content cues (Baym, 1995; Walther, 1993), but it provides higher controllability for users, which in turn, fosters the self-disclosure online (Walther & Parks, 2002).

Walther (1996) summarized several mechanisms of CMC that might facilitate self-disclosure. Firstly, CMC is editable, which allows users to edit their information, helping users to complete better replies. Secondly, without the presence in person, users could spend more time on constructing and refining messages, leading to less social awkwardness. Thirdly,

CMC users might send information in physical isolation from receiver, which makes users to be able to convey more discretionary information. Such isolation makes people easier to manage their self-presence.

Researchers in CMC have discovered significant difference in CMC self-disclosure among people from different cultures. People in collectivist culture, compared to people from individualist culture, are likely to treat themselves as part of groups, to give priority to in-group rules, to pay less attention to internal than to external conditions, and tend to be self-effacing (Triandis, 2001). People in collectivist culture are often reluctant to self-disclose to others (Triandis, 2001). Compared to people from collectivist culture, individuals from individualist culture are more independent and they have a higher level of self-disclosure during the interpersonal interaction (Kito, 2005; Chen & Nakazawa, 2009; Schug, Yuki, & Maddux, 2010; Lowry, Cao, & Everard, 2001). The existing research only focused on the general level of the CMC self-disclosure, but neglected how such effects worked.

Except for the perceived individualism-collectivism, self-consciousness also proves to be a predictor of self-disclosure. Self-consciousness mainly reflects the perception of the relationship between self and others, which significantly influences the intention to develop interpersonal relationship with others. Feinigstein et al. (1975) categorized the self-consciousness into three dimensions, including private self-consciousness, "dispositional tendency to focus attention on the more private and covert aspects of oneself"(Franzoi & Davis, 1985), public self-consciousness, which is characterized by "the attention to the self as a social object" (Reno & Kenny, 1992), and social anxiety, "a discomfort or a fear when a person is in social interactions that involve a concern about being judged or evaluated by

others (Antony et al., 2008)". Most studies in this field indicate that private self-consciousness is a positive predictor of self-disclosure, while public self-consciousness and social anxiety are negative predictors of self-disclosure (Franoi, & Davies, 1985; Franoi, Davies & Young, 1985; Leary & Kowalski, 1995; Reno & Kenny, 1992).

This study addresses the triangular relationship between perceived individualism-collectivism, self-consciousness and self-disclosure in SNSs. Different from other studies concentrating on the general level of self-disclosure, we assesses the effects of perceived cultural pattern and self-consciousness on three dimensions of self-disclosure, depth, honesty and valence, separately.

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Chapter 2: Literature Review and Hypotheses

Concept of Self-disclosure

Self-disclosure is the process of getting oneself known to others, making the previously private information to be shared information (Jourard & Lasakow, 1971). The shared knowledge of self refers to the disclosure between individuals and pairs, within groups or between groups. The intention of self-disclosure varies a lot, dependent on the context, in which such interaction happens. Within dyads, self-disclosure facilitates mutual understanding (Laurenceau et al., 1998) and creates trust in each other (Rubin, 1975). Particularly, the disclosure of highly emotional information increases the affinity in romantic relationships and friendships (Jourad, 1958). Disclosure within a group helps to build group identity, as well as strengthens the ties among group members (Joinson, & Paine, 2007). Furthermore, the disclosures between individuals and groups or organizations serve verification purposes, for instance, the filling of personal information forms while an organization is recruiting new employees (Joinson, & Paine, 2007). In this study, we mainly talk about the self-disclosure between individuals in computer-mediated media.

Self-disclosure is sometimes defined as disclosing intimate information about the self, especially in the loving relationships (Derlega, Metts, Petronio, & Margulis, 1993). In a counseling setting, the self-disclosure refers to the sharing of an aspect of private information with others, such as health condition (Goldfried et al., 2003). Self-disclosure includes one's thoughts, feelings, aspirations, goals, failures, successes, fears, dreams as well as one's likes, dislikes and favorites (Barry, 2006). Holtgraves (1990) identified four components of self-disclosure: "(1) information about the self is communicated verbally to others, (2) the

disclosure is voluntary and intentional, (3) the information provided is not readily evident to another, and (4) the disclosure must have implicit or explicit reference to the self.”

Social exchange theory explains the cognitive process that people go through before they decide to disclose certain information to others, as they weigh the costs and benefits of self-disclosure (Altman, & Taylor, 1973). In the situation that the expected benefits are greater than expected costs, people are willing to self-disclose. If the expected costs are greater than benefits, people are very careful during the self-disclosure and sometimes even fabricate fake stories. Sherby (2005) summarized the intention in self-disclosure as a trade-off between the need for connection and the need for protection in interpersonal relationships. People are longing for a sense of connection, awareness, and intimacy, all of which comfort them in general. On the other end, people aspire to maintain their privacy and disclose personal information only in specific situations in exchange for some others’ disclosure, but the self-disclosures are very cautious in this condition. It is common to see people self-disclose when they initially meet someone or intend to strengthen the liaison with others. As the interpersonal relationship develops, the self-disclosure happens more frequently. However, if one always refuses to self-disclose, then the other person may stop disclosing in turn, which might end up the relationship (Barry, 2006).

CMC self-disclosure. Walther proposed the hyperpersonal theory in 1996, arguing that CMC facilitates communication, that is, communication is more intimate in the CMC circumstance. According to hyperpersonal model, two characteristics of CMC media enhance the self-disclosure, including the reduced nonverbal cues and the controllability of CMC media. CMC is often considered as a medium reducing visual, auditory, and contextual cues

(Kiesler, Sigel, & McGuire, 1984). The reduced cues may help users to be relaxing, neglecting the constraints on themselves (Jessup et al., 1990). Without the presence pressure, CMC provides more time for users to review and edit the information sent to the receiver (Walther & Parks, 2002). Walther argues that the reduced nonverbal cues and increased controllability during interactions significantly reduce the individuals' inhibition while using CMC media, which increases the level of self-disclosure (Walther, 1996).

The experimental evidence implies that CMC behaviors often contain a higher level of self-disclosure. Reingold(1993) states that meaningful relationships can be attained in cyberspace because it veils the fear of communication apprehension. Since the anonymous identity of cyberspace guarantees the equality of users, the communication online is not constrained by the socio-economic status, educational background and occupation, instead, the common interests become the principal motivation to communicate with others. Therefore, people often reveal more honest information in computer-mediated media and build a more reliable and intimate relationship. Wallace (1999) claims that “The tendency to disclose more to a computer ... is an important ingredient of what seems to be happening on the Internet”.

CMC self-disclosure has been examined in different settings. The relationships formed between the Internet users, for instance, reported higher level of self-disclosure compared to the face-to-face interaction (Parks & Floyd, 1996). McKenna and Bargh (1998) found that some users in online news group only share some highly secret information with their online partners and benefit from such self-disclosure. Similarly, Chesney (2005) found that online diaries disclose a higher level of sensitive information. Tidwell and Walther (2002) concluded that the limitations of CMC media motivate individuals to avoid the peripheral

questions and raise more direct questions.

With the presence of computer media, the online survey and interview come into being as an important research tool. The interview in the CMC media demonstrates higher levels of self-disclosure and receives more recommendations from participants compared to the face-to-face interaction (Tidwell & Walther, 2002). Surveys online also proves to be more efficient on collecting some sensitive information (Tourangeau, 2003), displaying higher level of self-disclosure (Weisband & Kiesler, 1996) and increasing the responding rate (Joinson, 1999; Frick et al., 2001). Survey via Internet technology diminishes the influence of question administrator, which relaxes the participants, especially when it relates to the sensitive topics, such as STD and HIV risk behaviors (Des Jarlais et al., 1999).

Generally, researchers divide self-disclosure into five dimensions, including depth, honesty, amount, valence and intentionality of the disclosure (Leung et al., 2002; Rook, 1984; Wheelless & Grotz, 1976; Tardy, Hosman & Bradac, 1981; Wheelless, 1978). Depth in the online interaction indicates the extent of intimacy to the information receivers, which is the most influential dimension of self-disclosure. Honesty reflects how accurate the information published online. Valence refers to how positive or negative the information is posted online. Amount and intentionality of self-disclosure are difficult to measure because of the diversity of information online. Therefore, in this study, we concentrated on the depth, honesty and valence of self-disclosure.

Self-disclosure in SNSs. SNS is short for social networking sites or social networking service. It is a platform for users to develop social network among people who share similar interest. The first SNS, SixDegrees.com, was introduced to Internet users in 1997, which

innovated the way people communicate with each other (Boyd & Ellison, 2007). The last fifteen years witnessed the rapid expansion of SNSs. In 2008, the Federal Bureau of intelligence claimed that there were about 850 such websites (Swartz, 2008). These SNSs provide service to job hunting (e.g., LinkedIn), blogging (e.g., LiveJournal), photo-sharing (e.g. Flickr), and communicating with friends and family (e.g., Facebook, & Renren) (Special, Li-Barber, 2012).

Users of SNSs may establish their private space online and contact other registered members of SNSs (Boyd & Ellison, 2007). Except for the individual interaction, users may also join the online group based upon occupation, interests and education backgrounds, participating discussion on a certain topic, uploading and sharing videos, photos and articles and maintaining relationships with friends and families through messaging in the personal page (Boyd & Ellison, 2007). Such online space allows individuals to interact with friends living in a long distance away.

Facebook is recognized as the most widely used SNS, the most frequently visited, claiming to has more than 800 million active users (Facebook, 2011), among whom college students are the most active. Bumgarner (2007) summarized the uses of Facebook, arguing that Facebook uses include “friend functions (accepting/adding friends, browsing friend’s profiles, seeing how friends are connected); personal information (reading personal information, looking through photos, reading walls, etc.); practical information (being able to find contact information); regulatory functions (having editorial control over the content associated with their profile, ability to update information or photos, manage privacy settings); groups (view, create, and join groups); events (finding or creating events); and miscellaneous

features (liking, poking, etc.).”

Facebook provides various services to allow users to manage their self-disclosure, such as the setting of online or offline and the setting of the types of relationship and the information open to visitors (Special, Li-Barber, 2012). Facebook offers its users to disclose thoughts, opinions and feelings to online friends (Qian & Scott, 2007). Users may control the depth, honesty and valence of disclosure, effectively constructing the online identity, which might be different from daily life (Zhao, Grasmuck, & Martin, 2008).

Renren, is a Chinese SNS established in 2005, which literally means “Everyone’s Website” in Chinese. It is popular amongst college students in China, which is often referred to be Chinese Facebook. In 2011, Renren made an announcement claiming that it had 160 million users and a total of 31 million active users (Chao, 2011). It requires users to provide the information of names, gender, age, school and major, especially a photo as an avatar online (Yu, & Wu, 2010). After 2009, Renren expanded the target audience to general population, which achieved greater popularity in China. Unlike Facebook, the censorship is strict in Renren, especially to some political sensitive words. Before the posting of the blogs containing the sensitive information, the website spends several minutes to check the information included. In this study we examined the self-disclosure in both Facebook and Renren.

Culture and Self-Disclosure

Culture is an influential determinant that has great impact on self-disclosure. The term culture is usually interpreted as a set of socially acquired intellectual and behavioral patterns,

which belong to a particular society or human group (Fairchild, 1970). All societies have a specific formation of language, traditions, customs, shared meanings and institutions (Wallendorf, & Reilly, 1983). Culture defines the way individuals interact with others, since cultural norms provide the criteria to evaluate what is appropriate communication.

The reciprocal relationship between culture identity and communication patterns results in the various styles of self-disclosure in different cultural contexts (Nakanishi, 1987). “What, where, and how we should talk is regulated by culture (Chen, 1995).” Since culture is manifested in the communication behaviors, it definitely could be a strong predictor of self-disclosure. For instance, some researchers found that compared with Japanese, American disclosed more on several topics, such as physical appearance and sexual adequacy (Barnlund’s, 1975, 1989). Jourard and Lasakow (1958) proposed that American Whites revealed more private information to others than Blacks. Furthermore, researchers examined the effects of culture on several dimensions of self-disclosure. Wheelless, Erickson, and Behrens (1986) proved that non-Western culture was positively correlated with the depth of disclosure, whereas Western people’s amount of self-disclosure was significantly higher. In addition, “less depth, greater amount, less internal control locus, and more positively intended disclosures are associated with American participants rather than non-Westerns (Chen, 1995)”.

Characteristics of Chinese and American culture. East Asian culture is interpreted as "more formal and cautious in expressing themselves and communicate less openly and freely" (Barnlund, 1975). The phenomenon might result from the belief that collectivist culture made individuals more cautious in their individual behaviors that has potential

negative consequences to the group. The essence of traditional Chinese worldviews advocates the roles, statuses, positions, commitments, and responsibilities (Lu, 2008), so that individuals' behaviors must submit to the social norms. The social norms exert influences on the general society, working relationships and family relationships. "Confucian culture strongly recommends the priority of collective welfare and rewards self-control, diligent role performance, and rigorous self-cultivation" (Lu, 2008), which erases some unique personal characteristics. In China, an individual is not independent self, but a relational being such as a son, brother, husband and father. The relational values occupy the core of Chinese culture (Tu, 1985).

Except for the relational essence of Chinese perception of self, the concept of Chinese self is also a continuous process, which is strongly affected by the social reality. The Chinese self does not only reflect the individuals' thoughts and behaviors, but also "a tool for realizing an ideal society (Tu, 1985)"; thus, the absorption of dominant social and moral norms constitutes the Chinese self. The ideal situation for Chinese is to integrate self and society into a unity via self-control, self-cultivation, and self-transcendence (Lu & Yang, 2005). Also Confucian culture states that human beings are born as innocent but the quality of human being deteriorates with the influence of individual desire, hence it is necessary to strive for continuous improvement on morality to obliterate the dark sides of human beings (Tu, 1985; Lu, 2008). The self of Chinese people could be understood as an extension to incorporate more others and the resistance of individual desires is highly advocated (Lu & Yang, 2005).

Unlike Chinese perception of self, the American self is often defined as a "bounded, coherent, stable, autonomous, independent, and free entity" (Kashima & Hardie, 2000; Lu,

2003; Markus & Kitayama, 1991; Sedikides & Brewer, 2001; Triandis, 1989; Yang, 2004).

The self-presentation of an individual mainly reflects the internal thoughts, deriving from the perception that the wholeness and separateness are most crucial to human beings (Geertz, 1975). The essence of American culture locates on the personal talents, potentialities, needs, strivings, and rights, hence independence occupies the core of American life (Geertz, 1975).

The differences in communication styles between American and Chinese or Western and Eastern culture have been examined by existing studies. Becker (1986) concluded that Chinese people usually avoided argumentation during the interpersonal interaction, instead they inclined to express by behaviors. For example, some old proverbs in China like say “Words are the ladders leading to disorder”, “Much talking will lead to a dead end”, and “He who knows does not speak, he who speaks does not know”, all of which reject the talkative style of communication. Yum (1988) examined the different communication patterns between China and U.S and found that Chinese advocate “process orientation, differentiated linguistic codes, indirect communication, and receiver-centered communication”. In contrary, North Americans recommend “outcome orientation, less differentiated linguistic codes, direct communication, and sender-centered communication”. Leung (1987) found that in conflict situations, Chinese people show higher intention of bargaining and mediation. All of the differences in patterns of communication point to the potentiality that cultural difference may predict the patterns of self-disclosure.

Individualist and collectivist culture. Hofstede's (1980) defined the distinction between individualism and collectivism culture, which prevailed in the area of cultural studies for decades. In individualist societies, people are autonomous and independent from

their in-groups and their behaviors are based on the basis of individuals' values rather than group norms (Triandis, 2001). In collectivist cultures, people are interdependent each other, give priority to the groups goals, obey norms in-group, and behave in a unified way (Mills & Clark, 1982). People in collectivist cultures think highly of the relationships with others. In conflict situations, collectivists tend to concern maintaining the relationship and do not confront others (Ohbuchi, Fukushima, & Tedeschi, 1999). Because of the difference in cultural features, within interpersonal communication, people from individualist cultures are more frequent and intentional to self-disclose than those from collectivist culture (Barnlund, 1989; Gudykunst & Nishida, 1984; Wolfson & Pearce, 1983).

Researchers conducted several comparison studies to compare the people's self-disclosure between Western and Eastern world. Barnlund (1975) designed a survey research on the difference in interaction patterns among American and Japanese students. The results indicated that Americans disclosed more information on the topics like physical appearance, sexual adequacy, financial affairs, inner experience, and personal traits. Besides, another research targeted on the dimensions of self-disclosure implied that participants from non-Western culture endorsed greater depth of self-disclosure (Wheeles, Erickson, & Behrens, 1986). Researchers also found that Americans showed a higher level of self-disclosure than Chinese (Chen, 1995).

With the presence of computer-mediated media, researchers extend their research to the relationships between CMC self-disclosure and cultural patterns. In the early stage, Ma (1996) found that both American and Asian students showed little concern on the risks of self-disclosure online and disclosed themselves more online compared to face-to-face

interaction. Among Asian students, the difference in the level of self-disclosure between CMC and FTF was greater than American students, because Asian students suffered less cultural constraints online (Ma, 1996). Later, some studies have been made to specify the content of self-disclosure online. Researchers found that Americans talked about their origin, present residence and personalities of themselves online more frequently than Koreans, whereas individuals from both cultures were reluctant to disclose their name, age, and occupation (Kim and Papacharissi, 2003). Overall, Americans' depth and breadth of CMC self-disclosure are greater than Asians (Yum & Hara, 2005).

In the beginning of cultural studies, the term individualism is the opposite of collectivism. However, it is common that the results of cultural level analysis are different from the analysis on individuals. Therefore, scholars took advantage of some other different terms to represent the cultural features on individual level. Individualism and collectivism are used to describe the cultural identities at the cultural level, whereas at the individual level, the corresponding terms are idiocentrism and allocentrism (Triandis & Suh, 2002). "Idiocentrism emphasizes self-reliance, competition, uniqueness, hedonism, and emotional distance from in-groups. Allocentrism emphasizes interdependence, sociability, and family integrity; they take the needs and wishes of in-group members into account, feel close in their relationships to their in-group members, and appear to others as responsive to their needs and concerns" (Triandis, & Suh, 2002; Cross et al., 2000). Individuals may have both high level of idiocentrism and allocentrism. Scholars argue that an individual has both individualistic and collectivistic culture identity, but is strongly influenced by the mainstream culture (Markus, & Kitayama, 1991). In this study, we measured the participants' perceived

individualism and collectivism in the meantime.

Horizontal and vertical dimensions of individualism and collectivism. Although the individualism-collectivism construct is often interpreted as a unity, Triandis (1995) differentiated the vertical and horizontal dimensions of this construct. Horizontal patterns concentrate on the performance of oneself regardless of the others' self. In contrast, vertical patterns include the comparison between self and others. The individualism-collectivism construct can be categorized into the following patterns: horizontal individualism (uniqueness), vertical individualism (achievement orientation), horizontal collectivism (cooperativeness), and vertical collectivism (dutifulness).

Horizontal collectivists (HC) hold the opinion that the well-being of their in-group members is important to them, but they may not obey the group norms (Chiou, 2001). In contrast, vertical collectivists (VC) tend to relate themselves to group members, by advocating the group norms as well as sacrificing their interest to help their group members (Chiou, 2001). For horizontal individualists (HI), they seek to establish their uniqueness or individuality, but are not willing to compare themselves with others to seeking for distinctiveness. Vertical individualists (VI) are willing to express their ideas and outperformance other people. They highly value the proverbs that "competition is the law of nature".

To identify the four dimensions of cultural difference, researchers finished several studies in different cultural contexts. Individuals in the U.S tend to aspire distinction, achievement, success and outperformance everyone else (Markus & Kitayama, 1991; Triandis & Gelfand, 1998; Welton, 1984), which reiterates the characteristics of vertical

individualist culture (VI). In contrast to the U.S, the horizontal individualist (HI) culture, such as Scandinavians and Australians, show antipathy to successful persons especially those showing off their achievement, but valuing the modest styles (Askgaard, 1992; Daun, 1991, 1992; Feather, 1994; Nelson & Shavitt, 2002; Triandis & Gelfand, 1998). Meanwhile, East Asian society, a highly vertical collectivist (VC) world, emphasizes “the deference to authority and preservation of harmony in context of hierarchical relations with others” (Gouveia, & Pablo Espinosa, 2003). In vertical collectivist society, the status of one’s family is influential to the social status of an individual and all members should stick each other to achieve their group goals. In Israel, a highly horizontal collectivist (HC) society, people recommend the value of honesty, directness and cooperation (Gannon, 2001; Kurman & Sriram, 2002; Triandis & Gelfand, 1998).

H1a: American college students perceive greater vertical and horizontal individualism than Chinese students.

H1b: Chinese college students perceive greater vertical and horizontal collectivism than American students.

Because horizontal dimensions mainly focus on the feelings of self rather than comparing self to others, both horizontal dimensions may decrease the intention to communicate with others online and therefore decrease the depth of CMC self-disclosure. Meanwhile, those people high in HI and HC may tend to reveal the accurate information online because they do not care about the comments from others. For people high in HI or HC, due to their independency from others, they might post either negative or positive information online.

H2: Perceived HI negatively predicts the depth of self-disclosure in SNSs (H2a) and positively predicts the honesty of self-disclosure in SNSs (H2b).

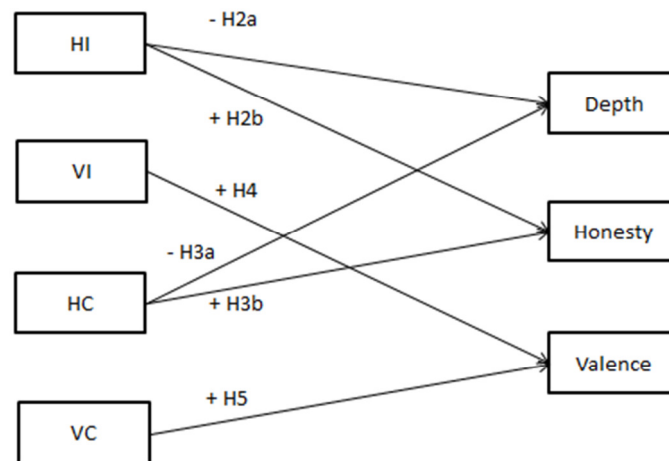
H3: Perceived HC negatively predicts the depth of self-disclosure in SNSs (H3a) and positively predicts the honesty of self-disclosure in SNS (H3b).

For people high in VI, because they tend to outperform other people, they might post more positive information about themselves in SNSs. Similarly, people high in VC, those who incline to help others may not be willing to bother others by avoiding posting negative emotion information online.

H4: Perceived VI positively predicts the valence of self-disclosure in SNSs.

H5: Perceived VC positively predicts the valence of self-disclosure in SNSs.

Figure 1: First Hypothesized Model



Self-consciousness and CMC Self-Disclosure

Another influential factor on self-disclosure in SNSs is personality. SNSs allow users to customize their own webpage and disclose the information they prefer to exchange with

others. The management of self-presentation reflects the characteristics of personality (Kramer, & Winter, 2008). Some existing studies found that self-reported personality traits were reflected in personal webpage (Buffardi, & Campbell, 2008; Marcus, Machilek & Schutz, 2006; Vazire & Gosling, 2004). In this study, we concentrated on three traits of personality, including private self-consciousness (PR), public self-consciousness (PU) and social anxiety (SA) because they proved to be crucial precursors of individuals' online and offline self-disclosure (Cheek & Buss, 1981; Franzoi & Davis, 1985; Gross et al., 2002; La Greca & Lopez, 1998).

The study of self-consciousness derived from the concept of self-awareness in the field of clinical psychology (Fenigstein, Scheier, & Buss, 1975). Self-awareness refers to the “capacity for introspection and the ability to recognize oneself as an individual separate from the environment and other individuals”. “When we focus our attention on ourselves, we evaluate and compare our current behavior to our internal standards and values” (Cohen, 2002). Therefore, people become self-conscious about their behaviors. People might feel upset if they cannot meet the internal standards of themselves (Cohen, 2002). When psychological consultants applied insight therapy to patients, “a method to cure patients through expressing feelings, motivations, beliefs, fears and desires” (Scaturo, 2010), they found that the variation in personality traits influenced the effects of treatment (Fenigstein, 1975). Some patients always monitor their behaviors and think about themselves, whereas some others are lacking in self-consciousness and do not care about themselves, and this difference influences the effects of treatment (Fenigstein, 1975). Based upon the variance of perception on self, self-consciousness emerged as an important variable in the psychological

research.

“The consistent tendency of persons to direct attention inward or outward is the trait of self-consciousness (Fenigstein, 1975).” Different from self-awareness, being conscious of oneself as an individual, self-consciousness reflects the consciousness of one’s appearance and manner. Self-consciousness exerts both positive and negative influences on the life of human beings, because it may either lead people to understand self objectively, enhancing the construction of personal characteristics, or it may be correlated with embarrassment and shyness, if they always focus on the negative side of self-presentation (Branden, 1969). There appears to be two types of self-consciousness: private self-consciousness (PR) mainly reflects the self-examination on feeling and inner emotions, and public self-consciousness (PU) indicates the “awareness and concern over the self as a social stimulus” (Fenigstein, et al., 1975).

Private self-consciousness refers to the "dispositional tendency to focus attention on the more private and covert aspects of oneself"(Franzoi & Davis, 1985). Buss (1980) argued that people high in self-consciousness had a tendency to disclose more because they had accurate self-perception. Franzoi and Davies conducted three studies to test the effects of private self-consciousness, which supported Buss's conclusion (Franoi, & Davies, 1985; Franoi, Davies & Young, 1985). They found that adolescents high in private self-consciousness disclosing more private information to peers and similarly, dating couples high in private self-consciousness talked more private information with their dating partners.

Public self-consciousness is characterized by “the attention to the self as a social object” (Reno & Kenny, 1992). Individuals high in public self-consciousness are concerned

about making a good impression, about what other people think of them, as well as the way they present themselves. Public self-consciousness affects the styles of interpersonal interaction (Reno & Kenny, 1992). Individuals high in public self-consciousness concern their self-presentation more, trying to make a positive impression on others so that their self-disclosure is often positive (Fenigstein, 1984).

Based upon the self-consciousness scale developed by Fenigstein, Scheier and Buss (1975), private self-consciousness scale includes the items assessing the self-reflectiveness (the introspection of one's own behavior) and internal state of awareness (the ability to reflect one's own emotions). For people high in private self-consciousness, as they are alert to mood changes and inner feelings, their perception of self are more concrete, which might increase the accuracy of self-disclosure. In the SNSs, people are longing for a sense of connection, awareness, and intimacy, but still aspire to maintain their privacy. They will be cautious in the revelation of self-information and try to reach a balance between privacy and connection to friends. Therefore, they may not be willing to reveal highly private information but to choose less private aspects of self. The information disclosed by people high in PR may be either negative or positive mainly depends on the changes of emotion.

H6: Private self-consciousness negatively predicts the depth (H6a) and positively predicts the honesty (H6b) of self-disclosure in SNSs.

People high in public self-consciousness (PU) often manage their self-presentation carefully. If one aims to make a good impression on others, they will be reluctant to disclose negative information about themselves. However, the disclosure could be either honest or not as they could be selective to disclose the bright side of one's life or make up some stories to

receive positive comments from others. When it comes to the depth of self-disclosure, people high in PU may either seldom disclose information online or always disclose positive information to boost oneself, leading to an uncertain effect on the depth dimension.

H7: Public self-consciousness positively predicts the valence of self-disclosure in SNSs.

Social anxiety refers to the awareness that one is worried about how one appears to other, and consequently inhibits the intention of social interactions (La Greca & Lopez, 1998). Individuals high in social anxiety are usually reluctant to contact or establish relationships with others (Leary & Kowalski, 1995).

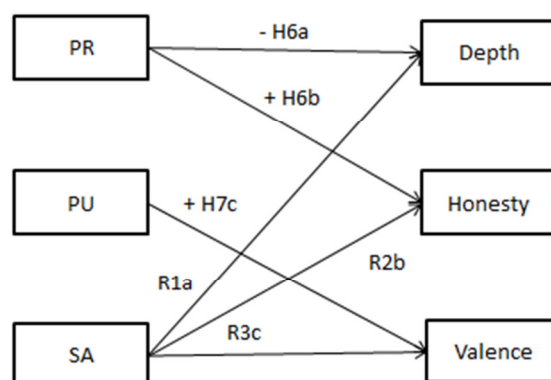
Generally, two hypotheses prevail in the explanation of the relationship between social anxiety and CMC self-disclosure. The first hypothesis, social compensation theory, argues that CMC is a more powerful social connection tool for those who have certain deficiency on communication in face-to-face condition, due to the anonymous identity and control of time by CMC media (Walther, 1996, 2002). The lacking of social cues helps erase the tension in face-to-face interaction and allows CMC users to control the time, pace and content of such communication, which makes those high in social anxiety more comfortable and confident on self-presentation (McKenna, Green, & Gleason, 2002; Stritzke, Nguyen, & Durkin, 2004). Several studies confirmed the validity of social compensation theory in the field of CMC. For instance, Peter et al. (2005) examined the motive of both introverts and extroverts on utilizing CMC to establish social interaction, indicating that introverted individuals were more motivated to use CMC than extroverts because they took it as a good way to compensate their deficiency in communication skills. Caplan (2003, 2005, & 2007)

also found a positive relationship between the level of social anxiety and the preference on social activities online. Feaster (2010) discovered that those with higher apprehension in face-to-face encounters inclined to prefer CMC over FtF channels.

The second hypothesis proposes that sociable persons with low social anxiety during social interactions are more extroverted online and benefit more in the CMC interactions. Compared with the introverts, the extroverts often perform better on expanding social networks through internet media, making rich get richer (Kraut et al., 2002). Some studies found that shy subjects in survey research reported lower level of self-disclosure (Jones & Briggs, 1984; Snell, 1989). Furthermore, individuals with higher level of social anxiety tend to self-disclose less during conversations compared with those non-anxious individuals (Daly, 1978; Pilkonis, 1977). In a word, based on the so-called "rich get richer" assumption, social anxiety inhibits the self-disclosure in both CMC and FtF situations.

RQ 1: What is the effect of social anxiety (SA) on self-disclosure in SNSs?

Figure 2: Second Hypothesized Model



Individualism and collectivism are most influential cultural determinants on individuals' personality and attitudes towards self and group (Kim & Hakkoe, 1994). Hefstede (2001) conducted a study to examine the effects of cultural difference. He found that Americans focused on individual achievement and income levels, emphasizing free thinking, individual expression and individual choice, whereas, Japanese focused on the group achievement, did not recommend free thinking and expression and had relatively limited personal choice (Hefsted, 2001). When it comes to familial connection, Americans focused on a small family group, whereas Japanese endorsed the big familial connections.

However, it is inappropriate to predict the personality difference of people from different culture only from the perspective of culture patterns. Personality and culture are correlated in ways that are not clearly understood. The cultural contexts of a society significantly influence the personality of individuals but cannot determine every aspects of personality (Ewen, 2003). Individualism and collectivism only represents one dimension of the major differences of cultures from different origins. Some common personal experiences may prove this argument. For instance, siblings grew up together in a family may had distinct personality traits, even though they were brought up in the same social culture and household culture.

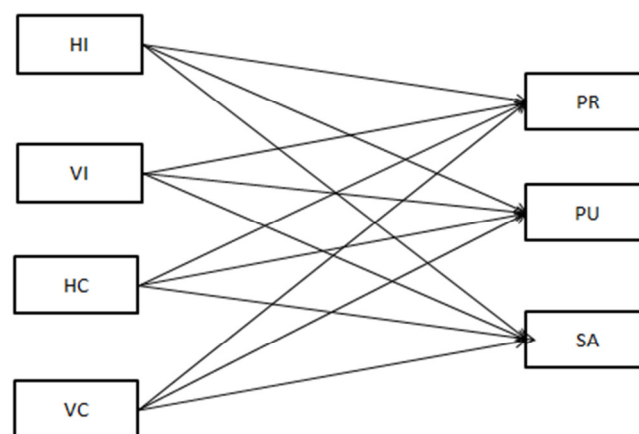
There are two major theories explaining the impacts of culture on personality. Erikson constructed a theory of personality development based on Freud's model of personality, arguing that personality evolves all the time (Ewen, 2003). Erikson (1963) found two observed phenomenon to support this theory: first, personal experiences of individuals impacted the way people interact with others, subsequently changing personalities; second,

with the increasing of personal experiences, individuals had greater impact on others. Therefore, we suppose that if a person often interacts with individualistic or collectivistic people, it is possible that he or she will be influenced and absorb the cultural patterns into their personality traits.

Another theory to explain the effects of culture on personality was developed by Jung, who treated personalities as a set of dichotomies (Jung, 1976). For example, introversion and extroversion exists in balance, but contradicts each other, the increase of introversion decreases the tendency of extroversion. Jung (1976) argued that personality was formed by both conscious and unconscious factors. The influence of individualism and collectivism were considered as unconscious factor by Jung' theory and these two dimensions should contradict each other. Therefore, it is possible that the culture influences the personality in a gradual and unconscious way.

RQ2: What is the effect of perceived individualism-collectivism (HI, VI, HC, VC) on self-consciousness (PR, PU, SA)?

Figure 3: Model 3



Control Variables

Except for the variables included in the hypothesized model, there are also some other variables that may affect CMC self-disclosure. To examine the proposed model, we will control the influence of two potential moderators, gender and self-esteem.

Gender and self-disclosure. Researchers have found both gender similarities and distinction in self-disclosure during interpersonal interactions. Generally speaking, women have higher levels of self-disclosure (Jourard, 1971), but the effect size is small in some studies (Dindia & Allen, 1992). For instance, Dominick (1999) conducted a study on the personal homepages of Yahoo website, which indicated that females tended to talk more about their attitudes on life, their personal stories and their family information, whereas males talked more about sports. Besides, there are also some similarities. There is no difference on the frequency of referring to hobbies and mechanisms of feedbacks (Dominick, 1999). Some other studies focused on the content of blogs. Researchers found that males and females had the same frequency in revealing ages, names, place of residence (Huffaker & Calvert, 2005), whereas females posted more pictures than males (Lenhart & Madden, 2007). In summary, the results are inconsistent in regard to the effects of gender on CMC self-disclosure.

R3: What is the effect of gender difference on the CMC self-disclosure?

Self-esteem and self-disclosure. Self-esteem is a term used in psychology referring to a person's emotional evaluation of his or her own worth (Rosenburg, 1965). It reflects the judgment of self and the attitudes toward self, which includes both beliefs and emotions (Hewitt, 2009). Self-esteem is the sum of the evaluation on personal capacity and personal worth, which influences the strategy people deal with challenging situations and affects the

way people communicate with others.

Banczyk et al. (2008) found that Myspace (a social network site) users with high self-esteem used more words to describe their life online. People with low self-esteem are more socially anxious, introverted, and shy than people with high self-esteem (Leary & McDonald, 2003). The low self-esteem people also perceived greater loneliness and have less satisfying relationship with others, compared to the high self-esteem people (Leary & McDonald, 2003; Wood, Hogle, & McClellan, 2009). The variance of self-esteem might affect the proposed hypotheses in this study. In SNSs, because people high in self-esteem are confident in self-presentation, they are not concerned about the comments and evaluations from others and also they are possibly satisfied with their life. Thus, those high in self-esteem might have a tendency to disclose accurate and positive information.

H8: Self-esteem positively predicts the honesty (H8a) and valence (H8b) of self-disclosure in SNSs.

Chapter 3: Method

Sample source

This study was conducted among American ($n = 368$) and Chinese ($n = 211$) college students. American participants were undergraduates from the University of Connecticut and Chinese participants came from several universities in Beijing, China. The survey scale was posted on two survey websites and all participants completed the survey online. Using Likert scales that ranged from 1, strongly disagree, to 7, strongly agree, participants were asked to answer questions, measuring their attitudes on perceived individualism-collectivism, self-consciousness, self-disclosure in SNSs and self-esteem, accompanied by some basic demographic information, including gender, age and education background. American subjects were required to evaluate their self-disclosure on Facebook and Chinese subjects were asked to recall their self-disclosure on a social networking site in China, named by Renren.

The age of participants mainly ranged from 18 to 25 (96.4%). By convenience sample, we recruited more female (56.3%) participants than male (43.7%). All participants admitted that they have an account on the social network. On average, participants spent about 10 minutes to complete the survey. In order to ensure the validity of answer from participants, we excluded those who finished the survey under 4 minutes as well as those picking the same answers to ten consecutive questions. After filtering the data, 292 American and 211 Chinese participants were left to further analyses.

Test on the validity of translation

With the increasing of international interactions, the comparison research between different cultures triggers scholars to explore cross-cultural research. Numerous questionnaires developed based upon the American culture were translated into other languages or adapted into other cultural circumstances, especially in the field of psychological studies. Though most studies assumed such translation fit well into the new culture with adequate validity and reliability as the original one did, actually such translated scales could differ from the original settings because of a variety of factors, such as construct bias, item bias and method bias (Hambleton, 2001). During the translation process, it is common to find that the same meaning expressed by means of different styles in different cultures, which explains why researchers always adapt the original instruments to fit into the new culture (Geisinger, 1994). Thus in general, as an instrument is adapted or applied into a new culture, the validity and reliability of the scale should be reassessed to make sure that the survey conveys same meanings to the target participants.

In this study, firstly we invited five graduate students studying in the U.S who are proficient in both English and Chinese to translate the original questionnaire into Chinese. And then we integrated the different translations into a comprehensive version which best reflect the original meaning. Secondly, we invited another five graduate students who are proficient in English and Chinese to translate the Chinese version back into English and we found that though most items basically reiterate the meanings of original items, there were six items that seemed to be problematic. Then we created a new questionnaire, including these six back translated items as well as the original items, and posted it online (See Appendix 4). In this short survey, we intended to test the accuracy of these six translated items. The

12-item survey was posted on survey monkey, a commercial online survey company, and fifty four participants took part in the survey. We examined both the correlation between new items and original items and processed a paired t-test to ensure that the correlation was not resulted from similar serial dependency. The results indicated that item 30, 31, 33 and 36 had a strong correlation ($r = .784, .844, .859, .663$) between the original and back translated question items, however, item 32 and 35 seemed to be problematic (See Table 3). By paired t-test on these four left paired items, we found that the original item 32 significantly different from the back translated item ($t = -2.465, p < .05$; See Table 4). To make sure the validity of translated scale, we dropped the item 31, 32 and 35 in both versions of the scale.

Measures

Self-disclosure in SNSs. This study measured the self-disclosure in SNSs with a set of questions modified by Lesung in 2002. Respondents were asked to mark the items evaluate the depth, honesty and valence of self-disclosure in SNSs.

Self-consciousness. Based on the theory of objective self-awareness, Fenigstein, Scheier and Buss (1975) established a Self-Consciousness Scale to measure the three dimensions of personality, private self-consciousness, public self-consciousness, and social anxiety. To assess the private self-consciousness, items like, the extent one "...Figuring out oneself", "...Reflecting about oneself", "Attentive to inner feelings", were included in the questionnaire. The public self-consciousness items covered issues like the consideration about the "style of doing things, concerning about the way of presentation, self-consciousness about how one looks...". Finally, Fenigstein (1975) created the items like "taking time to

overcome shyness”, “trouble working when watched”, and “getting easily embarrassed” to test the social anxiety of human beings. We applied the self-consciousness scale into this survey research.

Perceived individualism-collectivism. Triandis and Gelfand (1998) developed a brief scale to measure the culture patterns. The horizontal individualism items reflected the independency of an individual, whereas vertical individualism items measured the tendency to compare self to others. The items like, "If a coworker gets a prize I would feel proud," "The well-being of my coworkers is important to me," and "to me, pleasure is spending time with others", were used to measure horizontal collectivism (HC). Items stated that group or family members should stick together were used to examine the perceived vertical collectivism

Self-esteem. Rosenberg (1965) developed a self-esteem scale, which had been widely applied in the psychological studies. This scale measured the self-esteem by 10 self-report items on the description of feelings on the current life. Ellison et al. (2007) trimmed four weak items off and the reliability of the scale had been improved. In this study, we used the 6-item scale to examine self-esteem. (See Appendix 3)

Design of Analyses

Firstly, we examined the difference in perceived individualism-collectivism by independent t-test. Then we dummy coded the country variable into 1, representing U.S, and 2, representing China. We also reported the regression coefficient predicting individualism-collectivism by country variable.

Secondly, while controlling the effects of control variables, gender and self-esteem, we examined the three hypothesized models through structural equation modeling in AMOS 17.0 in the pooled data, American data and Chinese data separately. We included four indices of the model to assess the model fit: (a) model chi-square (X^2), (b) root mean square error of approximation (RMSEA) and (c) the comparative fit index (CFI). As suggested, these four indices are major indicators of a path model (Schouten et al., 2007). When RMSEA value locates between .06 and .08 and CFI value is greater than .95, the model is considered as good model fit (Byrne, 2001). To examine the difference in the model achieved in the U.S and China, we set equality constraints in the paths and compared the model fit before and after setting the constraints.

Thirdly, we examined the effects of gender and self-esteem on self-disclosure through structural equation modeling. We took gender and self-esteem as independent variables to predict the depth, honesty and valence of self-disclosure.

Chapter 4: Results

Results in the pooled data

We conducted a series of independent t-test to determine whether there is a difference in perceived HI, VI, HC and VC between Chinese and American respondents. To examine the effect size of such difference, we dummy coded country variable (1 represented U.S and 2 represented China) and predicted HI, VI, HC and VC by coded country variable. Some significant differences emerged in the t-test across the country samples.

H1a and H1b propose that American college students perceive greater HI and VI, whereas Chinese college students perceive greater HC and VC. The independent t-test supported H1b as the perceived HC ($\beta = .105$, $p < .05$; $t = -2.348$, $p < .05$) and VC ($\beta = .345$, $p < .001$; $t = -8.456$, $p < .01$) of Chinese respondents was significantly higher than U.S respondents. American (Mean = 5.00, SD = 1.19) respondents perceived greater HI than Chinese (Mean = 4.91, SD = 1.07) respondents, but the difference was not significant ($\beta = -.038$, $p = .391$). Meanwhile, Chinese subjects (Mean = 4.68, SD = 1.14) perceived slightly higher VI than the U.S (Mean = 4.53, SD = 1.16) but the difference was not significant ($\beta = .064$, $p = .153$). Hence, H1b was supported and H1a was rejected. (See Table 5)

Then we examined whether the hypothesized models proceed in the same way or not in these two countries. Since we already finished the validity test on translation, the differences in language was not a confounding factor to the differences between countries. We examined the differences in two ways: firstly, we examined the pooled data in AMOS to achieve the best fit model and then fit the data in U.S and China respectively into the best fit model with equality constraint based upon the path coefficient reached in the pooled data

(See Table 1); secondly, we achieved the best fit model in the U.S data and fit Chinese data into the model reached in the U.S data set with equality constraint based upon the path coefficient reached in the U.S data (See Table 2). The first test told us if the model in pooled data was different from the model achieved in U.S and China and the second test explained if the best fit models achieved in U.S and China data were significantly different.

In AMOS, while calculating the path models, the equality constraint demands the program to constrain the unstandardized coefficient for a certain path to be a constant. Equality constraints involve the test on delta-chi square with delta degree of freedom. If the delta-chi square test turns out to be significant, we say the constrained model reduces the model fit because the model with equality constraint significantly differs from the original one. By comparing the constrained and unconstrained model, we examined the delta chi square in each data set.

In the first test, we found that by fitting the data in the two countries into the model achieved in pooled data, both American and Chinese data indicated significant difference between constrained and unconstrained model in model three, whereas there was no big difference in model one and model two (See Table 1). It appeared that for model one and model two, the best fit model in pooled data was approximate to the model in U.S and China but for in model three, the model in pooled differed a lot to the model in U.S and China. In the second test, we followed the same process to compare the path model with constraints and without constraints. All three models proved to be significantly different, which implied the model achieved in U.S and China varied a lot. Therefore, we examined the hypothesized models in these two countries respectively.

Table 1: Test on the model achieved in pooled data

U.S.A				
Model No.	Without constraints	With equality constraints	Result of the test on delta chi square	
1	$X^2 = 13.134, DF = 7$	$X^2 = 16.785, DF = 12$	Ns	
2	$X^2 = 11.568, DF = 6$	$X^2 = 12.201, DF = 9$	Ns	
3	$X^2 = 6.225, DF = 3$	$X^2 = 21.102, DF = 12$	*	
CHINA				
Model No.	Without constraints	With equality constraints	Result of the test on delta chi square	
1	$X^2 = 12.098, DF = 7$	$X^2 = 17.895, DF = 12$	Ns	
2	$X^2 = 11.644, DF = 6$	$X^2 = 12.850, DF = 9$	Ns	
3	$X^2 = 7.489, DF = 3$	$X^2 = 29.208, DF = 12$	**	

Notes: **p < .01, *p<.05

Table 2: Test on the model achieved in the U.S data set

CHINA				
Model No.	Without constraints	With equality constraints	Result of the test on delta chi square	
1	$X^2 = 4.605, DF = 3$	$X^2 = 67.400, DF = 12$	**	
2	$X^2 = 5.963, DF = 4$	$X^2 = 37.379, DF = 9$	**	
3	$X^2 = 16.974, DF = 7$	$X^2 = 40.192, DF = 12$	**	

Notes: **p < .01, *p<.05

Results in the U.S data set

Confirmatory factor analysis and reliability test (U.S). To examine the validity of the scale applied in this study, we chose to use confirmatory factor analysis (CFA) to test whether all items loaded into the right factor.

We fit the 13 items of self-disclosure into three factors, including the depth, honesty and valence. The data turned out to fit well into these three dimensions ($X^2(62) = 132.525$, RMSEA = .063, CFI = .955; See Figure 4). The proposed four-factor solution to perceived individualism-collectivism also demonstrated acceptable fit ($X^2(49) = 150.799$, RMSEA = .084, CFI = .890; See Figure 5). By fitting the self-consciousness items into three dimensions, private self-consciousness, public self-consciousness and social anxiety, the results of CFA was not satisfactory ($X^2(167) = 490.724$, RMSEA = .082, CFI = .770; See Figure 6). The results of CFA showed that the self-disclosure scale and individualism-collectivism scale applied in this study were valid among American respondents. However, the self-consciousness scale did not work well. Some other researchers also doubted the validity of self-consciousness scale (Chan, 1996; Anderson et al., 1996; Grant et al., 2002). Since the self-consciousness scale was the empirical tool to measure PR and PU, we still used this scale in our study. The results achieved relating to self-consciousness might be lacking in reliability.

To confirm the internal consistency of the scale, reliability was estimated. Alpha reliability of self-disclosure proved to be adequate: depth (7 items, $\alpha = .882$), valence (3 items, $\alpha = .846$) dimensions appeared to be reliable. For honesty items, item 16 proved to be problematic as by deleting it, alpha increased from .543 to .709. Therefore, we dropped the

item 16. The reliability of the four dimensions of perceived individualism-collectivism also showed adequate reliability and were as follows, HI (3 items, $\alpha = .770$), VI (3 items, $\alpha = .693$), HC (3 items, $\alpha = .608$), VC (3 items, $\alpha = .772$). Reliability was also calculated for the personality variables and it was also adequate: private self-consciousness (7 items, $\alpha = .658$), public self-consciousness (7 items, $\alpha = .799$), social anxiety (6 items, $\alpha = .730$), self-esteem (6 items, $\alpha = .837$).

Hypothesis and research question testing (U.S). We examined the three hypothesized models with structural equation modeling. Firstly, we fit the U.S data into the saturated model to test all the possible paths in the proposed models. Secondly, we trimmed off the insignificant paths but still kept all the paths related to the control variable even though some effects of controlled variable were not significant. Because of the inclusion of some insignificant paths related to control variables, the model fit might not be adequate but what we focused here is the regression coefficients of endogenous variables.

Hypothesis 2 and hypothesis 3 assume that both HI and HC negatively predict depth of self-disclosure in SNSs and positively predict honesty of CMC self-disclosure. We found that while controlling the effect of gender and self-esteem, in the first model dealing with the relationship between perceived I-C and self-disclosure, HI negatively predicted depth ($\beta = -.119, p < .05$) and had no significant effect on honesty ($\beta = .090, p = .136$) or valence of CMC self-disclosure ($\beta = .003, p = .949$). Thus, H2a was supported. HC was found to be negative predictor of depth ($\beta = -.134, p < .05$) and valence ($\beta = .190, p = .003$) of CMC self-disclosure and positive predictor of the honesty ($\beta = .199, p < .01$) of CMC self-disclosure. Hence, H3a was supported and H3b was rejected.

Hypothesis 4 and hypothesis 5 argues\ that both VI and VC exert negative influence on valence of self-disclosure. While controlling the effects of gender and self-esteem, we found that in the path model, VI had no significant effect on depth ($\beta = .017$, $p = .771$), honesty ($\beta = -.024$, $p = .696$) and valence ($\beta = -.002$, $p = .973$) of CMC self-disclosure ;VC negatively predicted the honesty of CMC self-disclosure ($\beta = -.133$, $p < .10$), had no significant effect on depth ($\beta = .008$, $p = .007$) and valence ($\beta = .061$, $p = .297$) of CMC self-disclosure. Thus, H4 and H5 were rejected. (See Figure 10)

Then we took self-consciousness variables, PR, PU and SA as predictors to predict the depth, honesty and valence of self-disclosure in SNSs in the second proposed model. Similarly, we controlled the effects of gender and self-esteem in our path model.

H6 proposes that PR negatively predicts the depth and positively predicts the honesty of self-disclosure. In structural equation model, we found PR had a negative effect on depth of CMC self-disclosure ($\beta = -.190$, $p < .01$), positive effect on honesty ($\beta = .131$, $p < .10$) and valence of CMC self-disclosure ($\beta = .404$, $p < .01$). Hence, H6a and H6b were supported.

Hypothesis 7 postulates that PU positively predicts the valence of self-disclosure. Controlling the effects of gender and self-esteem, PU still positively predicted the honesty ($\beta = .163$, $p < .05$) of disclosure but failed to predict depth ($\beta = .025$, $p = .705$) and valence ($\beta = .045$, $p = .473$) of disclosure. Therefore, H7 was not supported

R1 asks the question of the effects of SA on the three dimensions of self-disclosure. Social Anxiety was found to be a marginally significant negative predictor of valence of CMC self-disclosure ($\beta = -.094$, $p < .05$), indicating people with higher social anxiety may disclose more negative information about themselves. (See Figure 11)

The third model paid attention to the effects of culture on personality by fitting the saturated model into the data in the U.S while still controlling the effects of self-esteem and gender. R2 instigates the effects of perceived I-C on self-consciousness traits. We found that HI positively predicted PR ($\beta = .257, p < .001$), PU ($\beta = .218, p < .001$) and SA ($\beta = .122, p < .05$); VI positively predicted PU ($\beta = .102, p < .05$) and SA ($\beta = .185, p < .01$); HC positively predicted PR ($\beta = .190, p < .001$) and PU ($\beta = .200, p < .001$); VC positively predicted PR ($\beta = .106, p < .05$) and SA ($\beta = .213, p < .001$). (See Figure 12)

R3 and H8 ask the effects of gender and self-esteem on CMC self-disclosure. To scrutinize the effects of gender and self-esteem, we utilized the structural equation model to test the effects of the two determinants above on three dimensions of self-disclosure. We found that male respondents in the U.S reportedly to reveal more in-depth information about themselves ($\beta = -.128, p < .05$), female respondents disclosed more positive information than male counterparts ($\beta = .142, p < .01$) and there was no gender difference in the honesty of disclosure. Self-esteem was usually considered as a positive predictor of self-disclosure. In this study we found that self-esteem positively predicted the honesty ($\beta = .226, p < .001$) and valence of self-disclosure ($\beta = .443, p < .01$) and self-esteem negatively predicted the depth of disclosure ($\beta = -.327, p < .001$). Hence H8a and H8b were supported. (See Figure 13)

Except for the main effects, we summed up the items of HI and VI to compute a variable, individualism, and summed up the items of HC and VC to a new variable, collectivism. While controlling the effects of gender and self-esteem, we examined the effects of individualism and collectivism on self-disclosure. We found that perceived collectivism

exerted a positive effect on valence of self-disclosure ($\beta = .191, p < .01$), and all other effects were insignificant. (See Table 8)

Then we combined HI and HC as well as VI and VC and computed two new variables, horizontal individualism-collectivism and vertical individualism-collectivism. While controlling the effects of gender and self-esteem, we used multiple regressions to test the effects of horizontal cultural patterns and vertical cultural patterns on self-disclosure in SNSs. We found that horizontal individualism-collectivism negatively predicted the depth of self-disclosure ($\beta = -.183, p < .01$) and positively predicted the honesty of self-disclosure ($\beta = .204, p < .01$) and there was a slight positive effect on valence of self-disclosure ($\beta = .110, p < .10$). (See Table 9)

Because self-esteem is an important variable in the study of personality, in the end, we examined the relationship between self-esteem and self-consciousness variables. We found that self-esteem was positively correlated with PR ($r = .537, p < .01$) and PU ($r = .256, p < .01$) and negatively correlated with SA ($r = -.117, p < .05$). (See Table 6)

Results in China data set

Confirmatory factor analysis and reliability test (CHN). Confirmatory factor analysis was conducted to examine the validity of the measure instrument in China. Through the test on self-disclosure items, we found that similar to the U.S data, item 13 did not load well. By dropping item 13, the model fit of self-disclosure items was adequate ($X^2(51) = 111.404$, RMSEA = .075, CFI = .889; See Figure 7). Then we fit the individualism-collectivism items into four dimensions, HI, VI, HC and VC. The model fit

was acceptable ($X^2(48) = 161.119$, RMSEA = .106, CFI = .865; See Figure 8). The factor loading of self-consciousness in China was poor ($X^2(149) = 554.474$, RMSEA = .114, CFI = .728; See Figure 9). As the personality scales are based upon the Western culture, the scale might not be appropriate in measuring Oriental culture. Lu suggested (2008) that to exactly assess the Oriental culture, the scale should consider the difference in measures on evaluation. In addition, as we stated before, the three-factor solution of self-consciousness scale is controversial. The results of analyses relating to self-consciousness may not fully reflect the PR, PU and SA. The reliability scores of all factors emerged in this study were acceptable: depth (7 items, $\alpha = .708$), valence (3 items, $\alpha = .686$), honesty (2 items, $\alpha = .702$), HI (3 items, $\alpha = .782$), VI (3 items, $\alpha = .626$), HC (3 items, $\alpha = .608$), VC (3 items, $\alpha = .839$), private self-consciousness (7 items, $\alpha = .708$), public self-consciousness (7 items, $\alpha = .857$), social anxiety (6 items, $\alpha = .539$), self-esteem (6 items, $\alpha = .663$).

Hypotheses and research question testing (CHN). We assessed the data collected in China through the estimation of structural equation modeling and examined both the saturated model and best fit model, controlling the effects of gender and self-esteem.

Hypothesis 2 and hypothesis 3 assume that both HI and HC negatively predict the depth of self-disclosure in SNSs and positively predict the honesty of self-disclosure in SNSs. We found that HI positively predicted the honesty of CMC self-disclosure ($\beta = .123$, $p < .10$) and had no significant effects on depth ($\beta = .031$, $p = .653$) and valence ($\beta = .063$, $p = .322$) of self-disclosure. Thus, H2b was supported. HC negatively predicted the depth ($\beta = -.139$, $p < .10$) of CMC self-disclosure but failed to predict honesty ($\beta = -.062$, $p = .45$) and valence ($\beta = -.057$, $p = .448$) of CMC self-disclosure. Hence, H3a was supported.

Hypothesis 4 and hypothesis 5 propose that both VI and VC exert negative effect on valence of self-disclosure in SNSs. We found that VI negatively predicted the valence ($\beta = -.157, p < .05$) of CMC self-disclosure and exerted no significant influences on depth ($\beta = -.044, p = .530$) and honesty ($\beta = -.056, p = .435$) of CMC self-disclosure. Hence, H4 was rejected. VC turned out to negatively predicted the depth of CMC self-disclosure ($\beta = -.135, p < .10$), positively predicted the valence of CMC self-disclosure ($\beta = .152, p < .05$) and failed to predict the honesty of CMC self-disclosure ($\beta = -.045, p = .573$). Hence, H6 was supported. (See Figure 14)

H6 proposes that PR negatively predicts the depth of CMC self-disclosure and positively predicts the honesty of CMC self-disclosure. PR proved to have a negative effect on depth of ($\beta = -.249, p < .001$) CMC self-disclosure, a positive effect on honesty of CMC self-disclosure ($\beta = .166, p < .05$) and indicated no significant effect on valence ($\beta = .073, p = .409$) of CMC self-disclosure. Hence, H6a and H6b were supported

Hypothesis 7 postulates that PU positively predicts the valence of CMC self-disclosure. In the path model, PU significantly predicted the valence of CMC self-disclosure ($\beta = .201, p < .01$) and had no significant effect on depth ($\beta = .075, p = .400$) and honesty ($\beta = -.134, p = .140$) of CMC self-disclosure. Hence, H7 was supported.

R1 focuses on the effects of SA on the three dimensions of self-disclosure. SA was found to have no significant effect on either of depth ($\beta = .063, p = .377$), honesty ($\beta = .010, p = .890$) or valence ($\beta = -.004, p = .947$) of CMC self-disclosure. (See Figure 15)

R2 instigates the effects of perceived I-C on self-consciousness traits. We examined the third dealing with the relationship between culture and personality traits by SEM. It

appeared that HI positively predicted PR ($\beta = .137, p < .01$) and negatively predicted SA ($\beta = -.138, p < .05$), VI positively predicts PU ($\beta = .103, p < .05$) and VC positively predicted PR ($\beta = .302, p < .001$) and PU ($\beta = .404, p < .001$). (See Figure 16)

R3 and H8 ask the effects of gender and self-esteem on CMC self-disclosure. To examine the effects of control variables, gender and self-esteem on CMC self-disclosure, we fit the data into a structural equation model, taking gender and self-esteem as predictors of depth, honesty and valence of CMC self-disclosure. The regression coefficient indicated that self-esteem positively predicted honesty ($\beta = .169, p < .05$) and valence ($\beta = .567, p < .001$) of CMC self-disclosure and male gender reported more in-depth disclosure compared with female counterparts ($\beta = -.123, p < .10$). Hence, H8a and H8b were supported. (See Figure 17)

Since most studies categorized the perceived individualism-collectivism into two dimensions, we examined the effects of individualism and collectivism as well as horizontal cultural patterns and vertical cultural patterns respectively. In this test, we found that in China, perceived collectivism (including HC and VC) negatively predicted the depth of self-disclosure ($\beta = -.232, p < .01$). And the vertical cultural patterns had a slight negative effect on the depth of self-disclosure ($\beta = -.145, p < .10$).

In the end, we examined the correlation between self-esteem and self-consciousness. We found that self-esteem was positively correlated with PR ($r = .571, p < .01$) and PU ($r = .484, p < .01$) and negatively correlated with SA ($r = -.316, p < .01$). (See Table 7)

Chapter 5: Discussion

This study elucidated the relationships among culture, personality traits and self-disclosure in SNSs. Most existing studies in the field of CMC self-disclosure treat self-disclosure as a general concept. In this study, however, we categorized the CMC self-disclosure into three dimensions, depth, honesty and valence and examined the effects on these three dimensions separately. To investigate the effects of cultural differences on the three dimensions of self-disclosure, we first examined the four dimensions of perceived individualism-collectivism in the U.S. and China, particularly to determine whether the new generation, college students, continued to reflect the general cultural pattern in each country; this study did not assume participants' cultural orientation and categorize them into collectivist or individualist. We found that Chinese young generations reported higher scores in horizontal collectivists and vertical collectivists than their American counterparts. However, American participants' responses showed no significant differences from their Chinese counterparts in HI and VI. Secondly, this study systematically examined the effects of horizontal and vertical individualism-collectivism on the participants' online interactions. We found that horizontal individualism-collectivism influenced the depth and honesty of self-disclosure, while vertical individualism-collectivism was relevant to the valence of self-disclosure. Thirdly, based on the assumption that self-consciousness impacted the communication patterns on CMC, we found that PR mainly predicted the depth and honesty of self-disclosure, PU predicted the honesty and valence of self-disclosure, and SA affected the valence of self-disclosure. In addition, we explored the potential correlations between perceived individualism-collectivism and self-consciousness.

Difference in perceived individualism-collectivism

According to a meta-analysis on the perceived individualism and collectivism among different cultures (Oyserman, Coon, Kemmelmeier, 2002), scholars have found American culture to be highly individualistic, while Chinese culture was categorized as highly collectivistic. Chinese culture was interpreted as emphasizing interpersonal dependence, indicating a highly vertical collectivist culture (Gannon, 2001; Kurman & Sriram, 2002; Triandis & Gelfand, 1998).

Our study found similar results that Chinese respondents reported higher score in both HC and VC than American respondents. Among the Chinese respondents, VC scores were significantly higher than HC, HI and VI scores, which suggested that Chinese students inclined to rely on their family members and friends, when faced with adverse situations. The perceived VI of Chinese was slightly higher than U.S counterparts, which contradicted with some other research stating that U.S culture was highly vertical individualistic (Markus & Kitayama, 1991; Triandis & Gelfand, 1998; Weldon, 1984).

The present results implied that the development of market economy and capitalism may exert influence on the culture patterns because the essence of market economy is competition. The increase of VI among Chinese might result from the booming economy during the last thirty years. Similarly, Chiou (2001) found that Taiwanese and American were equal in VI and when they included Argentina, they found that the rankings of economy matched exactly with the rankings of VI.

In recent research, researchers proposed a bicultural-self theory to explain the contemporary Chinese people, including two factors: the individual-oriented self and the

social-orientated self (Zhao, & Jiang, 2011). The social-oriented self could be traced back to the traditional Chinese culture, whereas the individual-orientated self comes into appearance with the development of economy, emphasizing the social competition in some situations, such as workplaces (Lu, 2008). Our study preliminarily supported the bicultural-self, as Chinese college students showed both high VC and VI. Further research should identify in what situation Chinese people prefer highly VI or VC styles.

U.S participants reported slight higher perceived HI than Chinese respondents, implying that Americans incline to rely on themselves, which is consistent with some other studies (Chiou, 2001; Gannon, 2001; Kurman & Sriram, 2002; Triandis & Gelfand, 1998). Compared with HI, U.S participants reported higher VC and equal HC, which indicated that American college students would prefer to construct cooperative relationship with others. Some other studies also found that college students cared more about friendships than the average population (Triandis & Gelfand, 1998). Since all U.S participants came from a rural campus and Chinese respondents were from a university in Beijing metropolitan regions, the difference in residence location might explain why Chinese respondents perceived greater vertical individualism because the job market in big cities is usually more competitive.

Some researchers have discussed the tendency of transition from collectivism to individualism in China. They argue that with the development of economy, the society stepped into a stage where the production depends on the industrialized machines. The advantages of collective work fade out (Hofstede, 2001; Triandis, 1995; Cao, 2009), because individuals are capable of realizing their dreamed goals independently. Thus, the features of modern society may be reflected by the fierce competition in job market and education.

Researchers attributed such transition into several factors, including economic development (Hofstede, 2001; Triandis, 1995; Allik and Realo, 2004), affluence of individuals (Yang, 1998), modes of production (Hofstede, 2001), mobility (Triandis, 1995), travelling and education (Triandis, 1995) and mass media (Hsu, 1983). Cao (2009) stated that the individualism factor also depended on the number of choices available to an individual. In the modern society, if people have enough options to realize their potential, people are inclined to depend on their personal effort rather than ask help from their relational circles.

Except for the explanation from the individual perspective, the transition from collectivism to individualism in China could also be explained in the changes of the general society. First of all, Pye (1991) argued that during the Cultural Revolution from 1966 to 1976, the extreme collectivism in China brought disastrous results to the whole society, such as the decline of society, damage to traditional culture and contempt for knowledge (Pye, 1991). After the enforcement of opening up policy in China, people aspire for changes, making individualist culture values to be accepted by the society.

Secondly, the economy transform in China shifted the economic structure from a central-planed system to a market-oriented system. As a result, lots of state-owned enterprises, those who have their own schools, hospitals, apartments and factories, were privatized, forcing the unemployed people to search for a job through their individual effort rather than depends on the relation with administration authorities in the state-owned firm (Sha, 2004; Wang et al., 2004). In addition, foreign companies introduced the modern enterprise system to China, which emphasizing the self-performance and the internal competition (Doder, 1998).

Thirdly, the expansion of college education in China during the last thirty years allows more young people to receive a higher level education. The modern Chinese education is constructed based upon the Western education structure. The education style that emphasizes the self-orientated needs is promoted to meet the needs of innovation in modern China. The newly revised Chinese education system aims to “enable students to select materials suited to their individual needs” (Zhang and Kong, 2004). Another factor transforms the perceived individualism-collectivism in China is the influence of mass media. The TV programs, Hollywood movies, sports games from Western world prevail in China these years, some of which have become evening routines among some families. The popularity of new media, such as SNS and mobile phone also promotes the self-oriented concept (Macfadyen et al., 2004).

Finally, since all the respondents are college students born in 1980s or 1990s, the specific identity of this generation might influence the perceived I-C. Post-1980s refers to the people born between 1980 and 1995, a generation born after the enforcement of One Child Policy, who enjoyed the fruits of economic development. For instance, they received qualified education, grew up in comparatively well off families, lived with the diverse types of media, Internet, mobile phone and TV (Cao, 2009). Moore (2005) and Garrott (1995) conducted two studies among Chinese college students, and found that this generation of Chinese people reported strong tendency of individualist pursuit, which was similar to the results I achieved. The post-90s generation is “open, rebellious, aggressive, pragmatic, self-oriented, strongly independent, hoping to be noticed, eager to make money and having great interest in expensive products (Stanat, 2006)”. The self-oriented life style of the

post-80s generation could be reflected on the facts that they are fashion makers (Moore, 2005; Doctoroff, 2007), extensive travelers (Cao, 2009), recreation indulger (Barber, 2001), the freedom seekers (Barber, 2001) and unique arts expresser (Cao, 2009). To understand the difference between Chinese and American college students, the new features of Chinese people could not be neglected.

Perceived individualism-collectivism and self-disclosure in SNSs

Some researchers proposed that collectivist culture had a negative effect on the depth of self-disclosure (Wheeler, Reis, & Bond, 1989) and decreased the valence of self-disclosure (Heyman, Fu, & Lee, 2008) and individualist culture increased the depth of self-disclosure (Yum & Hara, 2005). Contrary to the findings above, Wheeler, Reis and Bond (1989) found that Chinese people had longer interpersonal interactions than Westerners, which indicating that collectivist culture might increase the depth of self-disclosure. They also found that Chinese people had a higher frequency of group interactions than Americans. Although Chinese had a deeper disclosure in a certain relationship, in all, Chinese people had fewer interpersonal interactions compared with Americans. Posey et al. (2010) found that perceived collectivism positively predicted self-disclosure in online community. Before the test on hypotheses and research questions, we examined the general effects of individualism and collectivism, regardless of the distinction between horizontal and vertical dimensions. We found that in China, perceived collectivism negatively predicted the depth of self-disclosure in SNSs and in the U.S, perceived collectivism positively predicted the valence of self-disclosure in SNSs. The results imply that people high in perceived collectivism often

disclose positive aspects of self. Due the selection in the process of self-disclosure, the depth of self-disclosure is challenged.

Unlike other studies, we examined the second order effects of perceived individualism-collectivism (HI, VI, HC, VC) on each of the three dimensions of self-disclosure, depth, honesty and valence. Also in this study, we did not define the cultural patterns in advance but treated individualism-collectivism as a perceived construct so that each individual reported their perceived HI, VI, HC and VC in the meantime.

In our study, we found that in the U.S, perceived HI and HC negatively predicted the depth of self-disclosure, while in China, HC negatively predicted the depth of self-disclosure, suggesting that the horizontal individualism-collectivism may decrease the intent to communicate with others. If individuals perceive themselves as more independent and self-reliant, they are not willing to ask for help from other people and as a consequence, the self-disclosure is less frequent and lacking in depth. The statistical results indicated that in the U.S, the perceived HC positively predicted the honesty of self-disclosure and in China, the perceived HI positively predicted the honesty of self-disclosure. Because of the self-reliant characteristics, these individuals high in HI and HC tend to disclose accurate information online regardless of the comments from others and they may not care about the valence of information posted online. We conclude that generally, horizontal individualism-collectivism decreases the depth, increases the honesty of self-disclosure and has nothing to do with valence of self-disclosure.

When it relates to the vertical individualism-collectivism, in our study, we found that in China, VC significantly predicted the valence of self-disclosure in SNSs. Some other

scholars also found similar results. Heyman, Fu and Lee (2008) found that in vertical collectivist culture, the children took the positive self-disclosure, such as finishing a difficult test, to poor performers as an offer to help others rather than show off their performance. The positive self-disclosure in collectivist culture is less threatening because in such culture, individuals with poorer performers expect help from stronger performers (Hau & Salili, 1994; Li, 2005; Stevenson & Lee, 1996; Chen, 1993). Also we found that contrary to our hypothesis, in China, VI negatively predicted the valence of self-disclosure. Due to the dominance of vertical collectivism in Chinese society, direct interpersonal competition is not recommended and instead, the Confucian culture advocates an individual to watch over his or her own behaviors to avoid the potential conflict. Chinese culture also appreciates the suggestions from others, which is an effective way to find the personal defects, leading to the improvement of self in the future. "When people share their feelings of trauma, depressions and pressure with friends online, they may acquire social support and improve their integration with society (Pennebaker, 1997)." Therefore, the vertical individualist in China might perceive the negative self-disclosure as an opportunity to realize their own weakness and such disclosure became beneficial behaviors.

In the U.S data set, we only found that perceived VC had a slight negative effect on honesty of disclosure, whereas VI did not indicate any significant effects. The vertical collectivists often incline to strengthen the interpersonal relationship with others. In this study, as all the American respondents were college students, a period recommending comradeship but lacking in competition compared with the working people outside the campus, vertical collectivism might exert great influence on the bonding and bridging relationships online.

Bortee (2005) found that American adolescent girls maintained the relationships by disclosing “thoughts, frustration, disappointment, and occasional despair with friends via blogging”. To capture the attention from friends in SNSs, the disclosure will be attractive in content and sometimes even sacrifice the truthfulness.

In the end, we combined HI and HC as well as VI and VC and examined the effects of horizontal and vertical cultural patterns on self-disclosure in SNSs. We found that in the U.S, horizontal cultural patterns positively predicted the honesty and valence of self-disclosure and negatively predicted the depth of self-disclosure, whereas, in China, vertical cultural patterns had a slight negative effect on depth of self-disclosure. Since horizontal cultural pattern reflects the independent identity of an individual, the results indicate that independent people tend to disclose honest and positive information about self and such disclosure is lacking in depth.

Self-consciousness and self-disclosure in SNSs

Studies dealing with the relationship between self-consciousness and self-disclosure mainly paid attention to the difference of self-consciousness in CMC and face to face context. Matheson and Zanna (1988) found that ‘users of computer-mediated communication reported greater private self-awareness and marginally lower public self-awareness than subjects communicating face-to-face’. Weisband and Atwater (1999) suggested that CMC users perceived heightened private self-focus, because they overestimated their contributions to the discussion online. Joinson (2001) analyzed the impacts of increased private self-consciousness on self-disclosure: firstly, people high in self-consciousness were more

willing to self-disclose the private information; secondly, self-focused people revealed more accurate information during the interpersonal communication; thirdly, 'the heightened self-consciousness led to the salience of one's physical and affective states'.

Consistent with some other studies (Schouten, Valkenburg, & Peter, 2007; Reno, & Kenny, 1992; Franzoi & Davis, 1985; Davis & Franzoi, 1986), we found that among American and Chinese respondents, private self-consciousness had a positive effect on honesty of CMC self-disclosure. As people high in PR are typically more aware of their inner feelings, attitudes and thoughts (Franzoi & Davis, 1985), they have more information to disclose about themselves and consequently their CMC self-disclosure are more accurate and honest than others (Chen, 1993).

We found that both in both countries, private self-consciousness negatively predicted the depth of self-disclosure and particularly in the U.S, PR positively predicted the valence of self-disclosure, which implied that people who always scrutinize themselves might disclose more positive but less in-depth information. Some researchers suggested the existence of two separate dimensions of private self-consciousness: self-reflectiveness and internal state of awareness (Burnkrant & Page, 1984). The former factor mainly indicates the self-monitor in the expression of emotion and the later one reflects the ability to feel inner feelings and emotions. The self-monitor aspect of private self-consciousness inhibits the disclosure of negative sides of oneself. During the online interaction, people high in PR tend to avoid the revelation of negative emotions and express attractive information to facilitate the online interactions. Therefore, the private self-consciousness decreases the depth of self-disclosure in SNSs and increases the positivity of self-disclosure.

PU is short for public self-consciousness, which refers to “the awareness of how one appears in the eyes of others (Fenigstein, Scheier, & Buss, 1975, p.523)”. As people high in PU are concerned about the impression they left to others, they manage their self-presentation carefully to establish a positive self-image. Reno and Kenny (1992) found that PU was positively correlated with individuals’ belief about how their partners view them. Schouten, Valkenburg and Peter (2007) studied the attributes of online self-disclosure, they found that PU exerted a positive effect on the level of self-disclosure but they did not specify the effects on different dimensions of CMC self-disclosure. Miller and Cox (1982) argued that people high in PU may “engage in behavior that they believe will lead to a positive impression.”

Consistent with other studies, in this study, we found that among Chinese respondents, PU positively predicted the valence of self-disclosure in SNSs, indicating that people high in PU often disclose positive aspects of themselves. However, there was no significant effect of PU in American subjects. As we discussed before, American society appeared to be highly horizontal individualistic, indicating that Americans emphasize self-independence. Americans may not be interested in making a good impression on others, which might explain the insignificant effects of PU. In addition, we found that in the U.S, PU positively predicted the honesty of self-disclosure, which implied that although people high in PU chose to self-disclose selectively, the self-disclosure is still honest self-perceptions.

The effect of social anxiety on self-disclosure is controversial. Some researchers found that people high in social anxiety were more confident in CMC interaction (McKenna, Green, & Gleason, 2002; Stritzke, Nguyen, & Durkin, 2004; Caplan, 2003, 2005, 2007). However, in the face to face situation, people high in anxiety are reluctant to communicate

with others (La Greca & Lopez, 1998; Leary & Kowalski, 1995; DePaulo et al., 1986). Pilkonis (1977a, 1977b) argued that social anxiety was positively correlated with shyness and subsequently decreased the level of self-disclosure. Reno and Kenny (1992) supported the hypothesis that highly socially anxious people were less open and not willing to reveal the information about self to others. Arkin (1981) proposed the self-protective theory, stating that shy people are willing to adopt the self-protective self-presentation in order to avoid disapproval from others to accomplish their goal of self-impression management. People high in SA often choose to behave moderately and reflect themselves carefully till to be certain that disapproval from others will be unlikely (Arkin, Lake, & Baumgardner, 1986). During the interpersonal interactions, less anxious people are motivated by the positive evaluations from others and consequently have higher intention to disclose by means of attractive self-presentations (Arkin, 1981; Arkin et al., 1986; Schlenker & Leary, 1982). Meleshko and Alden (1993) argued that “socially anxious person’s attempt to protect him or herself from disapproval may actually elicit the exact reaction that he or she seeks to avoid”.

Consistent with other research, we found a slight negative correlation between social anxiety and valence of self-disclosure in SNSs among American respondents, whereas no significant result was extracted from Chinese respondents. The findings indicated that people high in SA might get embarrassed easily, shy in the public and hold doubtful attitudes to self, hence the information posted online could be more negative.

Relationship between self-consciousness and individualism-collectivism

Culture influences self by specifying the designs for living, norms for good

worldviews and the ways people think about self and others (Triandis, 1989). Self-cognition is a dynamic process, changing in different cultural environments (McGuire, McGuire, & Cheever, 1986). Thus, the perceived self-consciousness is highly correlated with the culture.

Triandis (1989) stated that in individualistic culture patterns, “child-rearing usually emphasizes self-reliance, independence, finding yourself and self-actualization”, all of which increase the cognition of private self. Individualistic culture might exert positive effects on private self-consciousness. Contrary to the individualistic culture, collectivistic culture recommends the values of collective, increasing the potential to construct collective self (Triandis, 1989). Collective self consists of the self-image within group and the group-image during the between group interactions. Therefore, collectivistic culture tends to increase the public self-consciousness during the interpersonal communication. In collectivist culture, people always follow the expectation from group members, even if they do not enjoy it. Bontempo et al. (1989) finished a research to examine the private and public consciousness among Brazilian (collectivist society) and American (individualist society) respondents. The questionnaire examined the intention of subjects to engage in a costly activity expected by the group (e.g., such as a visit to a group member in hospital) and all participants were asked to answer the question in front of group members and in private situation. They found that there was no big difference for Brazilian respondents between the two answers, both of which stated that they were willing to engage in such behavior as they highly cared about the well-being of group members, whereas American respondents reported positive answers in public but rejected such advice in private situation as they stated doing the costly behaviors were unlikely. In summary, we could conclude that collectivist society makes individuals

internalize the social norms to individual norms and the conformity to group norms makes them feel comfortable. On the other side, people high in perceived individualism also give way to conformity while facing up the judging pressure from others, but reject to conform the social norms while there is no presence pressure, indicating that individualist subjects display higher private self-consciousness than public self-consciousness (Triandis, 1989).

Researchers also found that social class moderates the effects of culture on self (Kohn, 1969, 1987; Triandis, 1976). Kohn did research on the child-rearing patterns in Italy, Japan, Poland and the U.S (1969, 1987) and found that child-rearing advocated the conformity to family norms in lower class. However, in upper class family, they upheld the concept that education should help children to construct their self-direction, creativity and independence. In this study, we did not consider the family backgrounds of subjects, but future study should address the effects of the social status on the self-consciousness.

In this study, we found that among Chinese and American respondents, vertical individualism-collectivism positively predicted PU. Horizontal individualism-collectivism appeared to positively predict PR. As we discussed before, some researchers hold the opinion that PR consisted of two dimensions, internal state awareness and self-reflectiveness. Internal state awareness reflects the ability to feel the inner emotions, which overlaps with the concept of HI, as those people are aware of themselves better.

There was a big difference in the relationship between HI and SA, which displayed a positive effect among Chinese respondents and negative effect among Americans. There is an old proverb in China says that one log cannot prop up the tottering building, suggesting that in China, people recommend cooperation with others. Therefore, in China, a self-reliant

person may be more anxious while facing up some problems. However, in the U.S, an individualist society, self-reliant person may be proud to weather crisis individually and the assistance from others might increase the anxiety. The positive relationship between HC and PR was a hint that the perceived collectivism and individualism did not contradict each other. It is possible that a person care about the well-being of others and also highly concern about their own feelings.

Effects of self-esteem and gender on self-disclosure in SNSs

Researchers found that the self-disclosure could be influenced by an individuals' self-esteem (Dolgin, Meyer, & Schwartz, 1991; Sahlstein & Allen, 2002). A person low in self-esteem may not be likely to disclose to the person high in self-esteem because such interaction may result in embarrassment (Seamon, 2003; Baxter & Montgomery, 1996). Because people high in self-esteem are more confident in their abilities to communicate with others, they are less restricted to reveal personal information than those low in self-esteem (Vera & Betz, 1992; Schimel et al., 2001; Seamon, 2003).

We found that American respondents high in self-esteem reported lower depth, higher honesty and valence of self-disclosure in SNSs and Chinese respondents reported similar results on honesty and valence of self-disclosure in SNSs. Consistent with other research (Baumeister, 1993), people with higher self-esteem show great confidence in life and thus do not fear to reveal the private life online. People with higher self-esteem may perceive greater satisfaction with life, so that they disclose more positive aspects about their life. Baumeister (1993) argued that since low self-esteem individuals had difficulty in finding positive aspects

about themselves, they tended to engage in downward social comparison to enhance self-esteem, whereas higher self-esteem people preferred upward social comparison to maintain their self-esteem. This difference may explain why high self-esteem people have less in-depth self-disclosure in SNSs.

Except for the correlation between self-esteem and self-disclosure, I also found that self-esteem was positively correlated with PR and PU and negatively correlated with SA in both U.S and China. Smith and Mackie (2007) defined self-esteem by stating that “Self-esteem is the positive or negative evaluations of the self, as in how we feel about it.” In our study, we proved that people with lower self-esteem tended to self-disclose negative aspects of self. On the other side, self-esteem reflects the evaluation of his or her worth, which has overlapped meanings with self-consciousness. While feeling self-conscious, people are alert to the emotion changes as well as the evaluations from others (Crozier, 2001). Therefore, self-esteem reflects one aspect of self-consciousness, which explained the correlation between among self-esteem and self-consciousness.

The assumption that females disclose more than men prevails in the communication study (Dindia & Allen, 1992; Dolgin, Meyer, & Schwartz, 1991; Jourard & Lasakow, 1958; Shaffer, Pegalis & Bazzini, 1996). Women might be sensitive to the negative comments from others because the feedbacks from others provide social validation on their positive qualities and accomplishments (Schimmel, Arndt, Pyszczynski, & Greenberg, 2001). Women need more than men to receive personal validation (Seamon, 2003). For men, they tend to report higher level of self-esteem, hence, the social validation of the self does not affect their intention of disclosure (Sahlstein & Allen, 2002; Shaffer, Pegalis, & Bazzini, 1996). We found that in

both China and U.S, males reported higher depth of self-disclosure and females reported more positive self-disclosure in SNSs, implying that males advocated the straightforward style of communication online and females were interested in constructing a positive self-image online. In addition, there was no significant gender difference in the honesty of self-disclosure.

Chapter 6: Limitations and Implications for future research

Firstly, the validity of the self-consciousness is problematic. When Feinigstein et al. (1975) originally developed the self-consciousness scale, they found that the factor loadings of five PR items were weak, which were below .50 and also another six items of PU and SA indicated poor factor loadings. The three-factor solution was widely accepted in most studies (Britt, 1992; Bissonnette & Bernstein, 1990).

However, the three-factor structure was challenged by some other researchers suggesting the existence of the two dimensions of PR, self-reflectiveness (SRF) and internal state of awareness (ISA). They argued that “SRF indicated lower means, higher variances, and more positive skewnesses than did ISA items (Bernstein et al., 1986; Piliavin & Charng, 1988).” Bernstein et al. (1986) argued that these differences implied the existence of these two dimensions in PR. Anderson et al. (1996) found that though SRF and ISA loaded into two factors, the loading coefficients were only around .50, which was insufficient to confirm the distinction between SRF and ISA. And when they (Anderson et al., 1996) divided PR into SRF and ISA, the reliability of the scale decreased, which indicated weak internal consistency. Chan (1996) examined the different factor solutions of self-consciousness and found that ISA items were highly correlated with the PU items. And Chan (1996) found that two-factor solution fit best, indicating that some items of PR and PU expressed similar meanings. Grant et al. (2002) created a new scale to measure PR, who defined the two sub-dimensions of PR as self-reflection and insight. In this study, they made a distinction between the self-presentation and self-monitor, which provided a new perspective to interpret PR.

In my perspective, PU reflects the intent to evaluate the comments and feedbacks

from others, whereas PR explains the motive of an individual to examine the internal emotions, feelings and thoughts. Therefore, during interpersonal interactions, PR leads people to behave in a proper way and PU indicates the evaluations from other people and consequently leads to the adjustment in PR. Further research should clarify the distinction between PR and PU.

Early studies found that interpersonal disclosure relied on the reciprocal principle that only when receivers and senders of disclosure mutually benefited from the interaction, the self-disclosure continued (Altman & Taylor, 1973; Cohen, Sherrod, & Clark, 1986; Chaikin & Derlega, 1974; Chelune, 1979; Cozby, 1973). Cunningham and Strassberg (1981) argued that the self-disclosure was a cognitive process, in which, individuals often evaluated their self-disclosure and partners' self-disclosure. Researchers found people who expected negative social consequences were reluctant to self-disclose to others (Strassberg, Adelstein, & Chemers, 1988) and the prediction of feedbacks may significantly influence the way of self-disclosure.

During interpersonal communications, friends' responses work as a mirror to reflect the self-disclosure. Fenigstein, Scheier, and Buss (1975) found that while angered subjects were exposed to a mirror to detect their self-presentation, they had a tendency to engage in more aggressive behavior. They also specified that subjects facing up with a mirror were more willingly to treat themselves as causal agents than control subjects. Future study should examine the motivation of self-disclosure and the effects of comments and feedbacks on the self-disclosure or self-presentation.

In this study, we focused on the most influential cultural difference, the difference in individualist and collectivist cultural patterns. However, in the cultural studies, Hofstede (1980) also proposed another three dimensions of cultural difference, masculinity/femininity, uncertainty avoidance, and power distance, all of which may affect the self-disclosure to some extent. For instance, Hall (1976) classified the high-context and low-context culture, indicating that people from high context (e.g. East Asia) and low context (e.g. North America) appeared to display significantly different communication styles. High context words include more implicit meanings, whereas low context expression is more straightforward. Future research should take the effects of other cultural differences into consideration.

To examine the effects of personality, we only focus on three dimensions, including public self-consciousness, private self-consciousness and social anxiety, because these three personalities have been proved to be related to the level of CMC self-disclosure (Schouten et al., 2007). Actually, other personalities may also impact the online behaviors, such as loneliness and extraversion. For example, Yu and Wu (2010) found that extraversion was negatively correlated with the disclosure of negative mood in SNS. Other personality traits should be included in the future studies.

Another direction for future research is to examine the variance in the perception of CMC media. Schouten et al. (2007) found that the perception in the controllability of CMC media varied a lot among computer users, which impacted the intention of CMC technology use and self-disclosure (Schouten et al., 2007; Lowry et al., 2011). Future studies should measure the variance in the perception of CMC. In addition, except for survey research, more

experimental research should be applied in this field, because self-report survey is often subjective, lacking in accuracy on the explanation of self-behaviors.

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Appendix

Appendix 1: Figures

Figure 4: CFA of CMC Self-disclosure Scale (U.S)

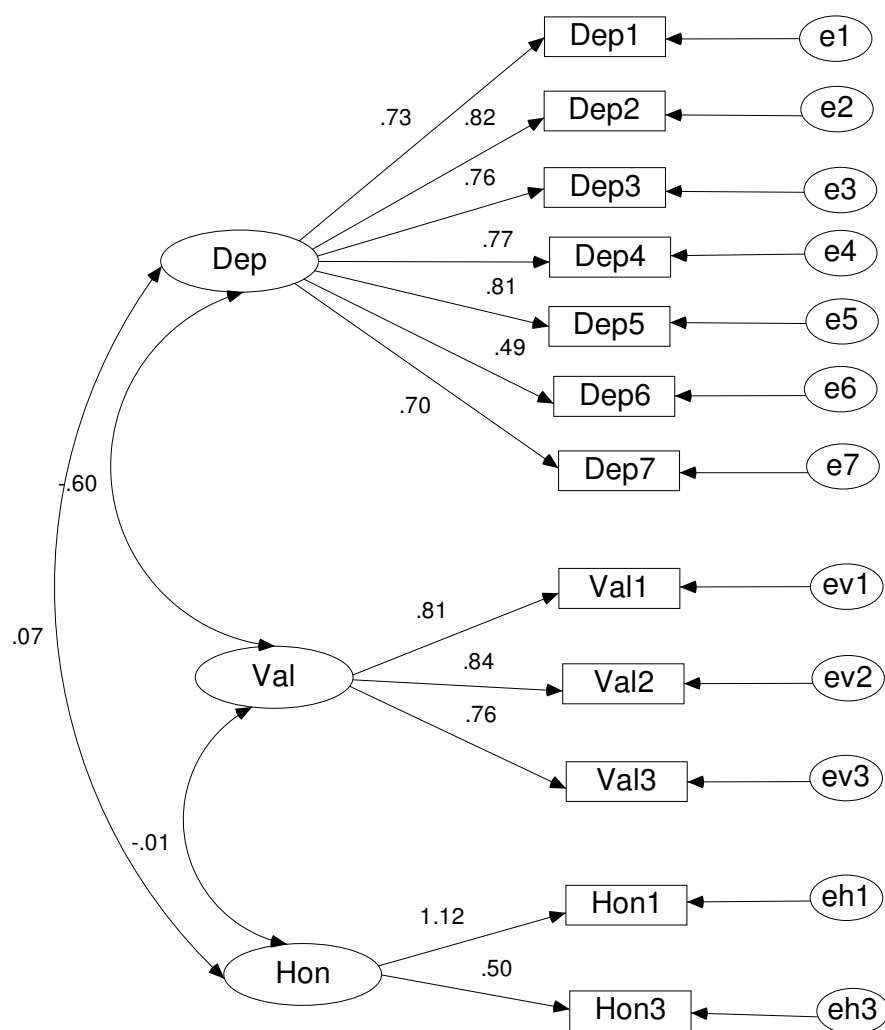


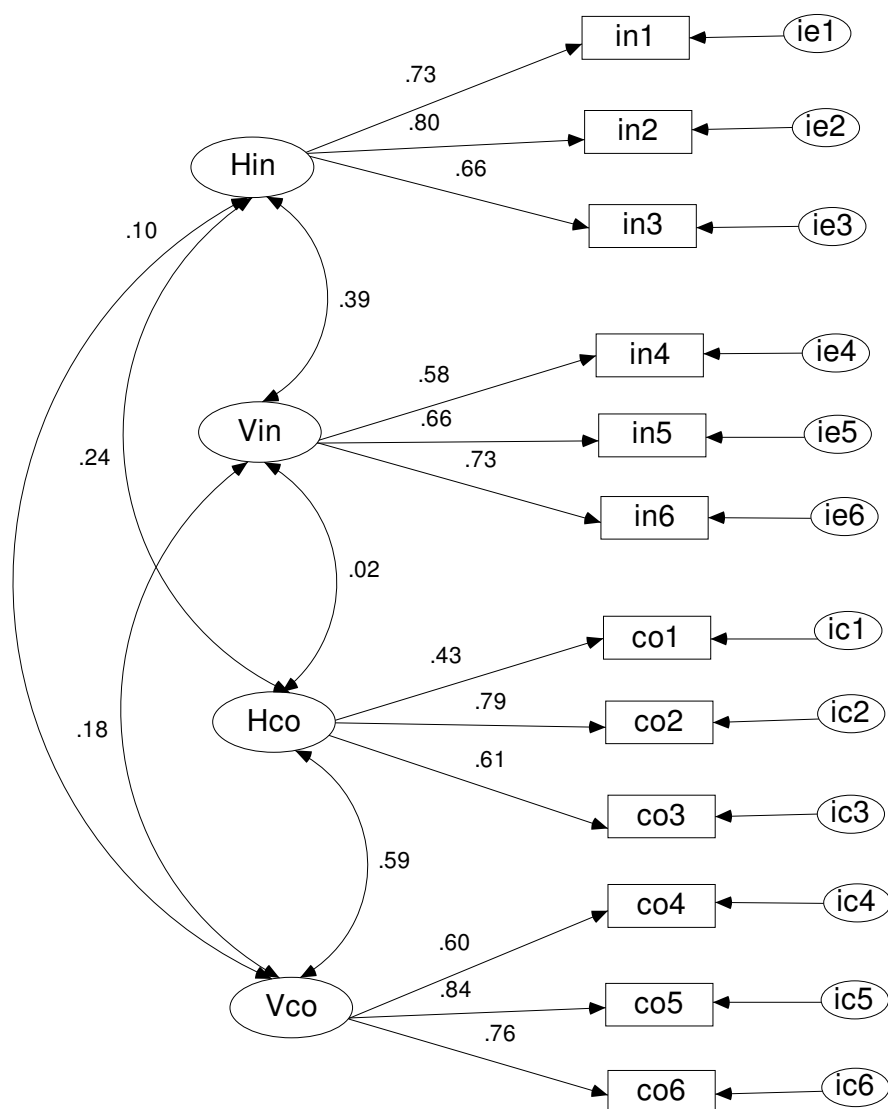
Figure 5: CFA of Perceived Individualism-Collectivism in the U.S

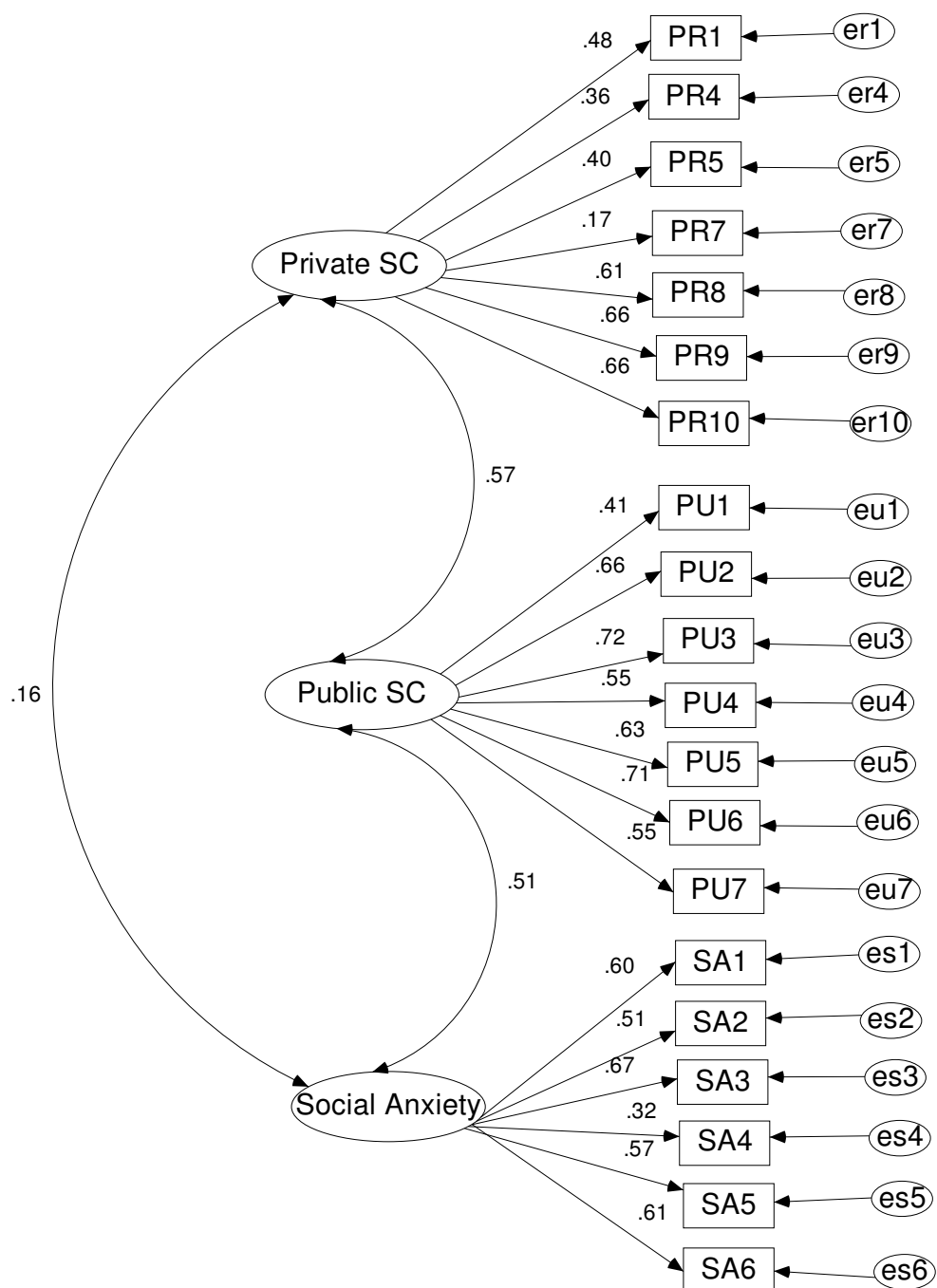
Figure 6: CFA of Self-Consciousness Scale in the U.S

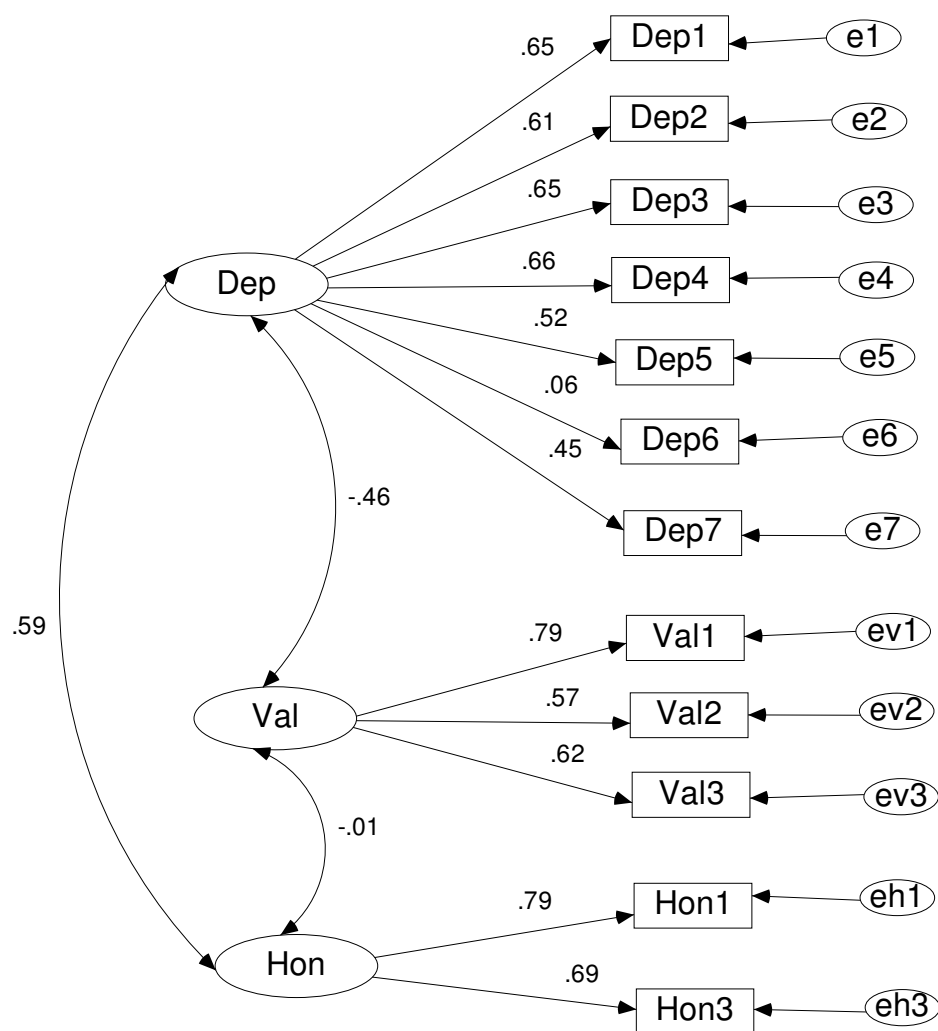
Figure 7: CFA of CMC Self-disclosure Scale in China

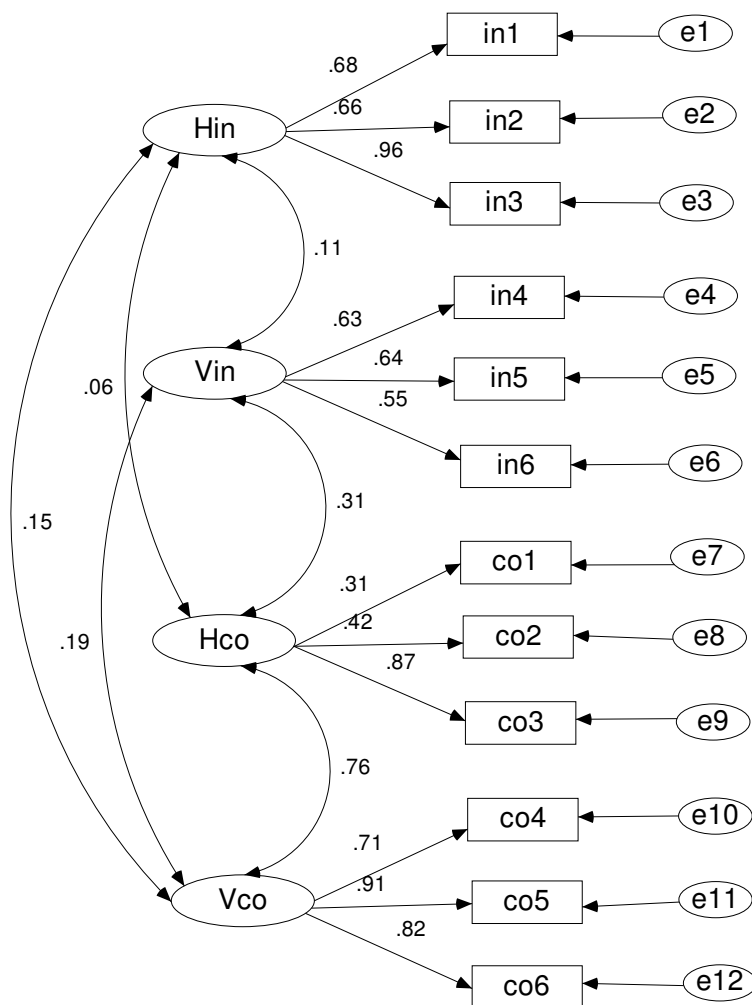
Figure 8: CFA of Perceived Individualism-Collectivism in China

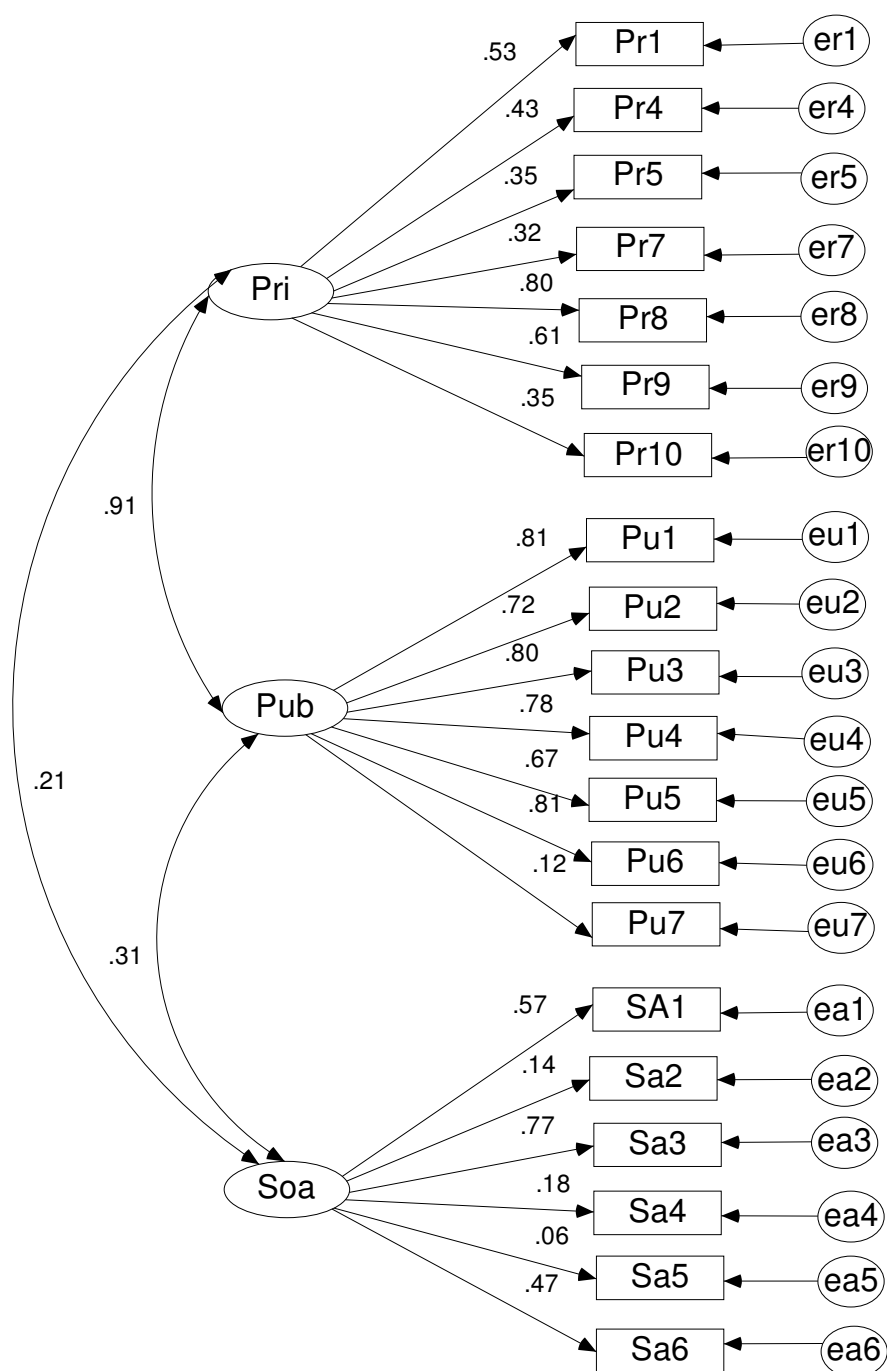
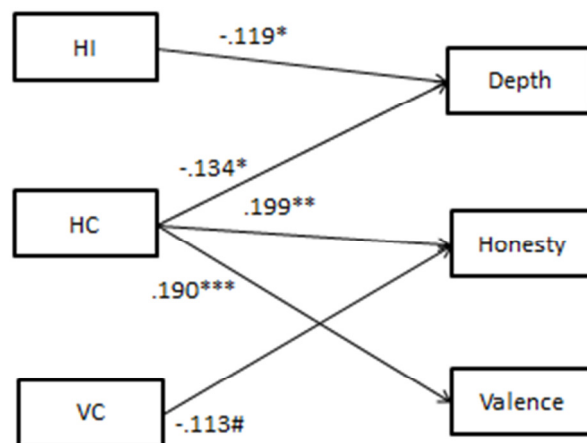
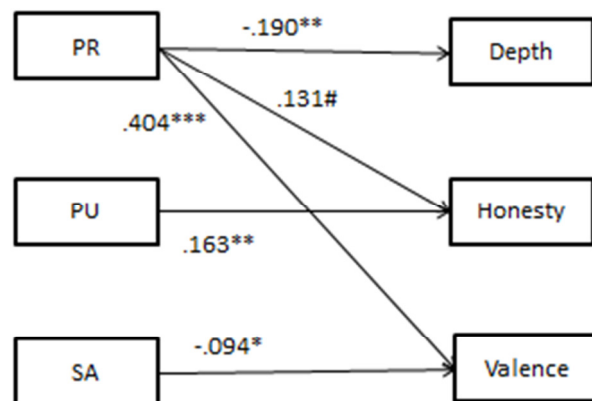
Figure 9: CFA of Self-Consciousness Scale (China)

Figure 10: Best Fit Model of data in the U.S (Model 1)

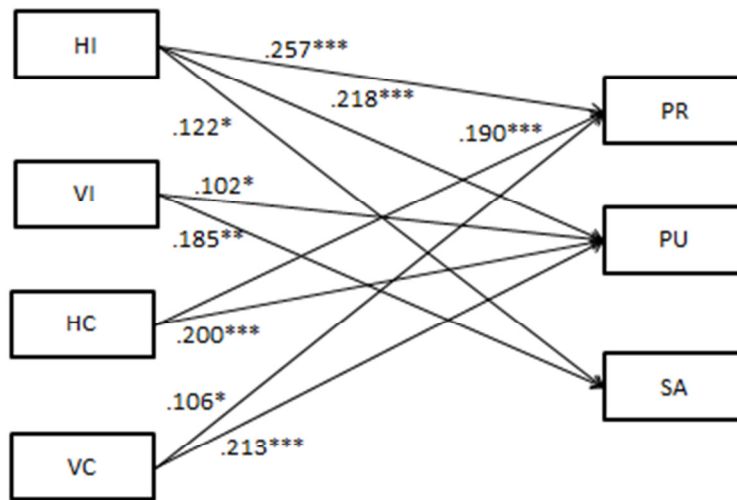
Notes:

$\# p < .10$; $* p < .05$; $** p < .01$; $*** p < .001$

Figure 11: Best fit model of data in the U.S (Model 2)

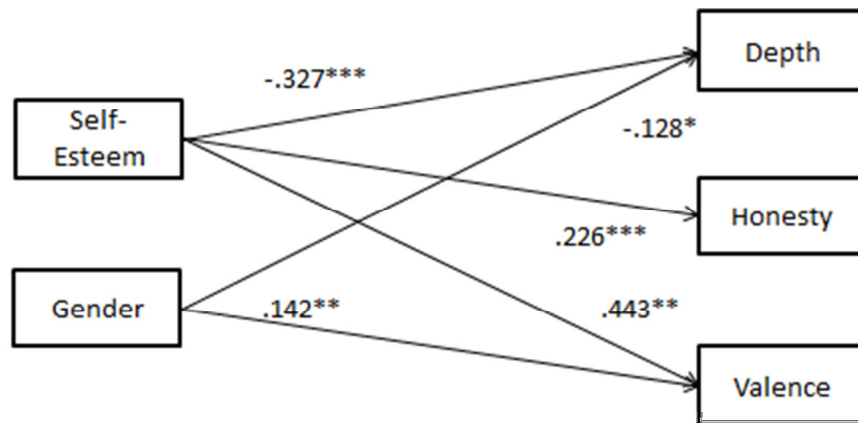
Notes:

$\# p < .10$; $* p < .05$; $** p < .01$; $*** p < .001$

Figure 12: Best fit model of data in the U.S (Model 3)

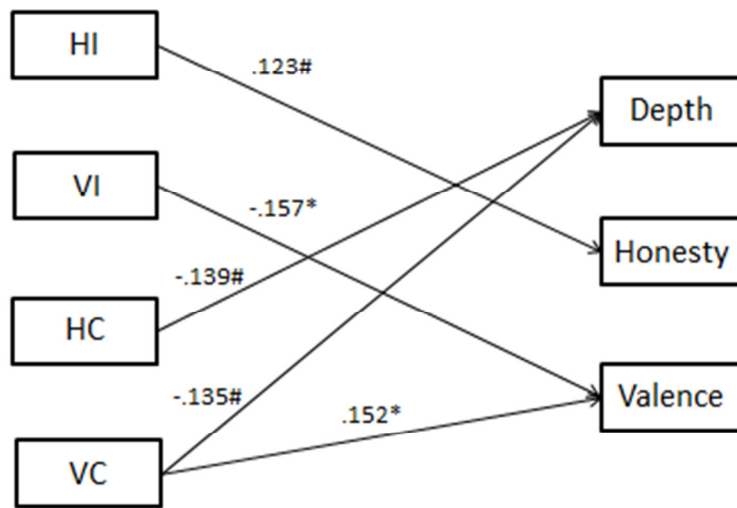
Notes:

$p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Figure 13: Effects of self-esteem and gender on CMC self-disclosure (U.S)

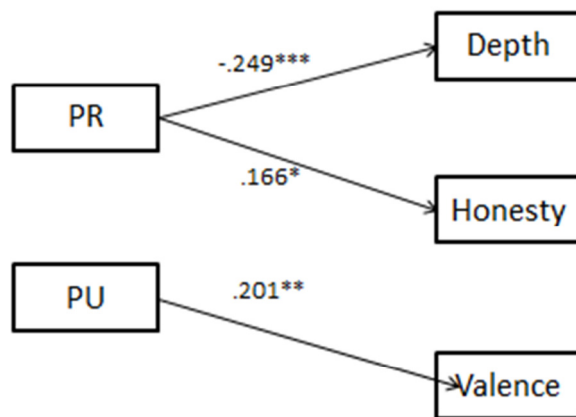
Notes:

$p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Figure 14: Best fit model of data in China (Model 1)

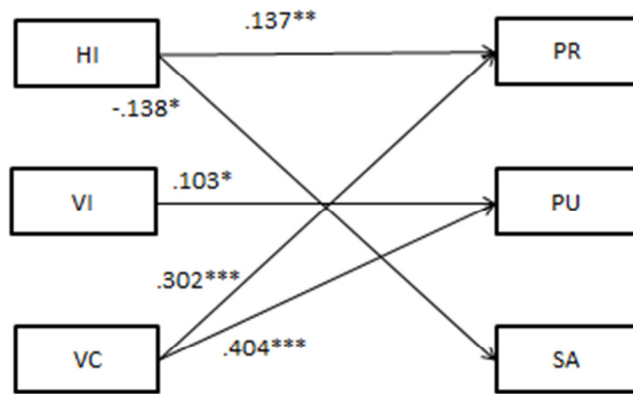
Notes:

$p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Figure 15: Best Fit Model of data in China (Model 2)

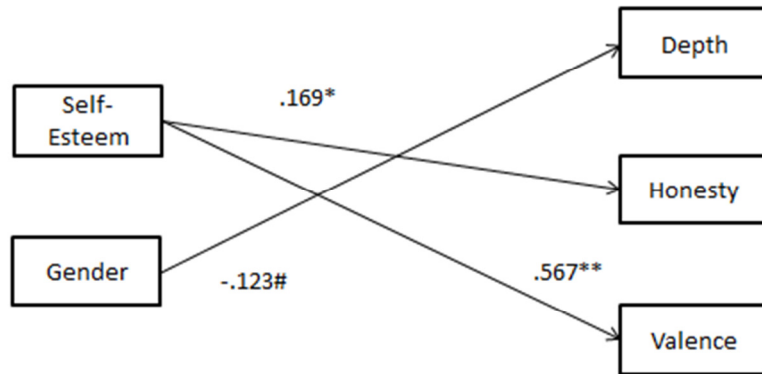
Notes:

$p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Figure 16: Best Fit Model of data in China (Model 3)

Notes:

$p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Figure 17: Effects of self-esteem and gender on CMC self-disclosure (China)

Notes:

$p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Appendix 2: Tables**Table 3: Correlations between original question items and back-translated items**

	Pearson Correlation
E1 – C1	.784**
E2 – C2	.844**
E3 – C3	.109
E4 – C4	.859**
E5 – C5	.017
E6 – C6	.663**

Notes:

** . Correlation is significant at the 0.01 level (2-tailed).

C: The items translated back from Chinese

E: The original English items

Table 4: Paired Samples t-test on the original question items and back-translated items

Paired Samples Test											
			Paired Differences						t	df	Sig.
			Mean	Std.	Std.	Error	95% Confidence	Interval			(2-tailed)
				Deviation	Mean		of the Difference				
							Lower	Upper			
Pair 1	E1 C1	-	-.07407	.63992	.08708		-.24874	.10059	-.851	53	.399
Pair 2	E2 C2	-	-.18519	.55198	.07511		-.33585	-.03452	-2.465	53	.017
Pair 3	E4 C4	-	.07407	.72299	.09839		-.12326	.27141	.753	53	.455
Pair 4	E6 C6	-	-.01852	1.36659	.18597		-.39153	.35449	-.100	53	.921

Notes:

C: The items translated back from Chinese

E: The original English items

Table 5: T-Test on HI, VI, HC, VC between Chinese and American Respondents

Group Statistics					
	Country	N	Mean	Std. Deviation	Std. Error Mean
HI	U.S.A	291	5.0000	1.18580	.06951
	CHN	211	4.9115	1.07278	.07385
VI	U.S.A	290	4.5276	1.16374	.06834
	CHN	211	4.6769	1.13530	.07816
HC	U.S.A	290	5.0874	.94821	.05568
	CHN	211	5.2852	.90643	.06240
VC	U.S.A	290	5.1034	1.17648	.06909
	CHN	211	5.9218	.98444	.06777

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
HI	Equal variances assumed	.977	.323	.858	500	.391
	Equal variances not assumed			.872	476.238	.383
	Equal variances assumed	.089	.765	-1.433	499	.153
VI	Equal variances not assumed			-1.439	458.923	.151
	Equal variances assumed	.149	.699	-2.348	499	.019
	Equal variances not assumed			-2.365	463.860	.018

	Equal					
	variances	15.314	.000	-8.224	499	.000
	assumed					

VC	Equal					
	variances			-8.456	489.287	.000
	not					
	assumed					

Table 6: Correlation Coefficients between Key Variables (U.S)

	Gen	Dep	Hon	Val	HI	VI	HC	VC	PR	PU	SA	SE
Gen	1	-.189**	-.006	.224**	.087	-.173**	.220**	.039	.171**	.295**	.112	.186**
Dep	-.189**	1	.034	-.504**	-.187**	-.026	-.284**	-.169**	-.331**	-.178**	-.039	-.354**
Hon	-.006	.034	1	.011	.131*	.022	.210**	.044	.256**	.222**	.030	.214**
Val	.224**	-.504**	.011	1	.107	.020	.366**	.281**	.423**	.230**	-.082	.469**
HI	.087	-.187**	.131*	.107	1	.305**	.182**	.082	.363**	.323**	.161**	.166**
VI	-.173**	-.026	.022	.020	.305**	1	-.009	.119*	.160**	.161**	.179**	.102
HC	.220**	-.284**	.210**	.366**	.182**	-.009	1	.435**	.436**	.376**	-.039	.409**
VC	.039	-.169**	.044	.281**	.082	.119*	.435**	1	.362**	.356**	.026	.402**
PR	.171**	-.331**	.256**	.423**	.363**	.160**	.436**	.362**	1	.467**	.078	.537**
PU	.295**	-.178**	.222**	.230**	.323**	.161**	.376**	.356**	.467**	1	.354**	.256**
SA	.112	-.039	.030	-.082	.161**	.179**	-.039	.026	.078	.354**	1	-.117*
SE	.186**	-.354**	.214**	.469**	.166**	.102	.409**	.402**	.537**	.256**	-.117*	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 7: Correlation Coefficients between Key Variables (China)

	Gen	Dep	Hon	Val	HI	VI	HC	VC	PR	PU	SA	SE
Gen	1	-.135	-.064	.132	-.127	-.005	.124	.053	.078	.125	.072	.112
Depth	-.135	1	.412**	-.332**	-.011	-.092	-.228**	-.215**	-.246**	-.114	.092	-.119
Honesty	-.064	.412**	1	-.018	.118	.008	-.004	-.012	.200**	.058	-.067	.160*
Valence	.132	-.332**	-.018	1	.077	-.001	.170*	.222**	.334**	.337**	-.110	.405**
HI	-.127	-.011	.118	.077	1	.144*	.167*	.191**	.213**	.079	-.175*	.068
VI	-.005	-.092	.008	-.001	.144*	1	.193**	.173*	.288**	.307**	-.114	.314**
HC	.124	-.228**	-.004	.170*	.167*	.193**	1	.512**	.383**	.305**	-.035	.374**
VC	.053	-.215**	-.012	.222**	.191**	.173*	.512**	1	.454**	.517**	-.044	.258**
PR	.078	-.246**	.200**	.334**	.213**	.288**	.383**	.454**	1	.647**	-.196**	.571**
PU	.125	-.114	.058	.337**	.079	.307**	.305**	.517**	.647**	1	-.051	.484**
SA	.072	.092	-.067	-.110	-.175*	-.114	-.035	-.044	-.196**	-.051	1	-.316**
SE	.112	-.119	.160*	.405**	.068	.314**	.374**	.258**	.571**	.484**	-.316**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 8: Effects of perceived individualism and collectivism on self-disclosure in SNSs (U.S)

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	5.162	.468		11.038	.000
In	-.090	.063	-.079	-1.422	.156
Co	-.121	.075	-.101	-1.615	.107
Gender..1	-.301	.124	-.135	-2.421	.016
SelfEsteem	-.284	.067	-.268	-4.252	.000

a. Dependent Variable: Depth

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.892	.682		2.773	.006
In	.091	.093	.058	.986	.325
Co	.083	.109	.051	.764	.446
Gender..1	-.141	.182	-.046	-.778	.437
SelfEsteem	.270	.097	.186	2.771	.006

a. Dependent Variable: Honesty

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.298	.520		2.495	.013
In	.005	.071	.004	.072	.943
Co	.273	.083	.191	3.278	.001
Gender..1	.339	.138	.128	2.452	.015
SelfEsteem	.441	.074	.351	5.941	.000

a. Dependent Variable: Valence

Table 9: Effects of Horizontal individualism-collectivism and Vertical individualism-collectivism on self-disclosure in SNSs (U.S)

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.163	.464		11.122	.000
Gender..1	-.241	.127	-.108	-1.903	.058
SelfEsteem	-.291	.064	-.276	-4.543	.000
Horizontal	-.240	.080	-.183	-2.995	.003
Vertical	.021	.075	.017	.284	.777

a. Dependent Variable: Depth

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.882	.672		2.800	.005
Gender..1	-.273	.183	-.089	-1.489	.137
SelfEsteem	.272	.093	.187	2.927	.004
Horizontal	.368	.116	.204	3.177	.002
Vertical	-.162	.109	-.095	-1.491	.137

a. Dependent Variable: Honesty

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.262	.525		2.404	.017
Gender..1	.349	.143	.132	2.438	.015
SelfEsteem	.487	.072	.387	6.717	.000
Horizontal	.172	.091	.110	1.895	.059
Vertical	.069	.085	.047	.817	.415

a. Dependent Variable: Valence

Table 10: Effects of perceived individualism and collectivism on self-disclosure in SNSs (China)

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.594	.603		9.274	.000
In	-.013	.085	-.011	-.156	.876
Co	-.279	.089	-.232	-3.148	.002
SelfEsteem	-.023	.089	-.019	-.263	.793
Gender..1	-.219	.135	-.111	-1.624	.106

a. Dependent Variable: Depth

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.583	.837		4.281	.000
In	.074	.118	.046	.626	.532
Co	-.136	.123	-.083	-1.102	.272
SelfEsteem	.307	.123	.187	2.498	.013
Gender..1	-.195	.188	-.073	-1.041	.299

a. Dependent Variable: Honesty

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.874	.675		2.778	.006
In	-.107	.095	-.076	-1.126	.261
Co	.145	.099	.102	1.466	.144
SelfEsteem	.547	.099	.382	5.525	.000
Gender..1	.171	.151	.073	1.132	.259

a. Dependent Variable: Valence

Table 11: Effects of Horizontal individualism-collectivism and Vertical individualism-collectivism on self-disclosure in SNSs (China)

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.540	.610		9.076	.000
SelfEsteem	-.033	.089	-.028	-.371	.711
Gender..1	-.256	.135	-.129	-1.895	.060
Horizontal	-.104	.099	-.080	-1.055	.293
Vertical	-.177	.095	-.145	-1.860	.064

a. Dependent Variable: Depth

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.467	.839		4.133	.000
SelfEsteem	.310	.123	.189	2.524	.012
Gender..1	-.218	.185	-.081	-1.175	.242
Horizontal	.120	.136	.067	.881	.379
Vertical	-.167	.131	-.101	-1.275	.204

a. Dependent Variable: Honesty

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.845	.680		2.714	.007
SelfEsteem	.568	.100	.396	5.699	.000
Gender..1	.211	.150	.090	1.406	.161
Horizontal	.098	.110	.063	.892	.374
Vertical	-.064	.106	-.044	-.600	.549

a. Dependent Variable: Valence

Appendix 3: Survey Questionnaire

1. Your gender

2. What is your age?

18 to 24

25 to 34

45 to 54

55 to 64

65 to 74

75 or older

3. What is the highest level of education you have completed?

Primary school

Junior Middle School

Senior Middle School

Some College, no degree

Associate degree

Bachelor degree

Graduate degree

4. Ethnicity

White

Black

Asian

Latino

Native American

Arabic

Other

The following questions will be finished by a 7-Likert scale, in which 1 refers to totally disagree and 7 refers to totally agree.

1-Strongly disagree

2-Disagree

3-Slightly disagree

4-Neither agree or disagree

5-Slightly agree

6-Agree

7-Strongly agree

5. I usually talk about myself on Facebook for fairly long periods of time
6. I often disclose intimate and personal things about myself without hesitation on Facebook
7. Once I get started, I intimately and fully reveal myself in my self-disclosures on Facebook
8. I do not often talk about myself on Facebook (R)
9. On Facebook, I feel that I sometimes do not control my self-disclosure of personal or intimate things I tell about myself
10. I often discuss my feelings about myself on Facebook
11. Once I get started, my self-disclosures on Facebook last a long time.
12. On Facebook, my statements about my feelings, emotions, and experiences are always accurate self-perceptions
13. I am not always honest in my self-disclosures on Facebook (R)
14. I always feel completely sincere when I reveal my own feelings and experiences on Facebook
15. On the whole, my disclosures on Facebook about myself are more negative than positive (R)
16. On Facebook, I often reveal more undesirable things about myself than desirable things (R)
17. On Facebook, I usually disclose negative things about myself (R)
18. I'd rather depend on myself than others
19. I rely on myself most of the time; I rarely rely on others
20. I often do my own thing
21. It is important that I do my job better than others
22. Winning is everything to me
23. Competition is the law of nature

24. If a coworker gets a prize, I would feel proud
25. The well-being of my coworker is important to me
26. To me, pleasure is spending time with others
27. Parents and children must stay together as much as possible
28. It is my duty to take care of my family, even when I have to sacrifice what I want
29. Family members should stick together, no matter what sacrifices are required
30. I usually figure out myself
31. I usually reflect about myself (X)
32. I usually subject to my own fantasies (X)
33. I never scrutinize myself
34. I usually examine my own motives
35. I usually feel off watching myself (X)
36. Sometimes I am not aware of myself
37. I am attentive to inner feelings
38. I am alert to mood changes
39. I am aware of how my mind works
40. I am concerned about style of doing things
41. I am concerned about the way of presentation
42. I am self-conscious about how I look
43. I am worrying about impression
44. I usually look in mirror before leaving house
45. I am concerned about what others think of me

- 46. I am aware of my own appearance
- 47. I take time to overcome shyness
- 48. I have trouble in working when watched
- 49. I usually get easily embarrassed
- 50. I do not find it hard to talk to strangers (R)
- 51. I am anxious to speak before a group (Chinese R)
- 52. I am nervous in large groups
- 53. I feel that I am a person of worth, at least on an equal plane with others
- 54. I feel that I have a number of good qualities
- 55. All in all, I am inclined to feel that I am a failure (R)
- 56. I am able to do things as well as most other people
- 57. I feel I do not have much to be proud of (R)
- 58. I take a positive attitude toward myself
- 59. On the whole, I am satisfied with myself

You have finished the survey. Thank you very much for your time!

Appendix 4: Survey on the validity of translation

The following questions will be finished by a 7-Likert scale, in which 1 refers to totally disagree and 7 refers to totally agree.

- 1-Strongly disagree
- 2-Disagree
- 3-Slightly disagree
- 4-Neither agree or disagree
- 5-Slightly agree
- 6-Agree
- 7-Strongly agree

- 1. I usually figure out myself
- 2. I usually reflect about myself
- 3. I usually subject to my own fantasies
- 4. I never scrutinize myself
- 5. I usually feel off watching myself
- 6. Sometimes I am not aware of myself
- 7. I usually understand my own feelings.
- 8. I usually monitor my own behaviors.
- 9. I often obey to my thoughts.
- 10. I never monitor my own behaviors.
- 11. Sometimes, I do not watch over my own behaviors.
- 12. Sometimes, I do not care about my own feelings.

Appendix 5: Invitation to the Survey

Information Sheet for Participation in a Research Study

Principal Investigator: Arthur Vanlear Ph. D.

Student Researcher: Hongliang Chen

Title of Study: Effects of perceived individualism-collectivism and personality traits on self-disclosure in SNSs

Dear Participants,

You are invited to participate in a survey to examine the effects of cultural difference on self-disclosure on Facebook. This study aims to propose and test an attribute model of the level of self-disclosure on Facebook. All items included are self-reported with a 7-point Likert scale. The respondents of this study are randomly selected from the registered members of both U.S and Chinese commercial survey website.

If you agree to take part in this study, you will be asked to fill out the questionnaire. It includes some basic demographic information such as your gender, educational background, ethnicity and age. In addition, some items are designed to examine your attitude about your self-disclosure on Facebook, personality traits and perceived cultural identity. On average, it is estimated to take you fifteen minutes to finish.

All the information is anonymous and nothing is highly private. We believe there are no known risks associated with this research study. As a registered member, you may benefit from the commercial survey website.

After data are collected, the survey results will be monitored only by the PI (Dr. Vanlear) and a student researcher. All electronic data will be encrypted. Besides, all the paper files will be moved to PI's office which no one else has access to. At the conclusion of this study, the researchers may publish their findings. Information will be presented in summary format and you will not be identified in any publications or presentations.

You should also know that the UConn Institutional Review Board (IRB) and the Office of Research Compliance may inspect study records as part of its auditing program, but these reviews will only focus on the researchers and not on your responses or involvement. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

You do not have to be in this study if you do not want to. If you agree to be in the study, but later change your mind, you may drop out at any time. There are no penalties or consequences of any kind if you decide that you do not want to participate.

You do not have to answer any question that you do not want to answer.

Take as long as you like before you make a decision. We will be happy to answer any question you have about this study. If you have further questions about this study or if you have a research-related problem, you may contact the principal investigator, Professor Vanlear at 860-486-4569, or the student researcher Hongliang Chen at 860-634-8677. If you have any questions concerning your rights as a research participant, you may contact the University of Connecticut Institutional Review Board (IRB) at 860-486-8802.

Appendix 6: IRB Approval

DATE: June 13, 2013

TO: Arthru VanLear, Ph.D.
Hongliang Chen, Student Investigator
Communication, Unit 1085

FROM: Deborah Dillon McDonald, RN, Ph.D.
Chair, Institutional Review Board
FWA# 00007125

RE: Exemption #X13-025: "Effects of Perceived Individualism-Collectivism and Self-Consciousness on Self-Disclosure in SNSs"
Please refer to the Exemption# in all future correspondence with the IRB.

The request for approval of an amendment received June 4, 2013 for the above-referenced protocol was approved by the Institutional Review Board (IRB) on June 13, 2013. The amendment does not change the IRB's previous determination that the study is exempt under 45 CFR 46.101(b)(2): Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation. Enclosed please find a validated information sheet. An approved, validated information sheet (with the IRB's stamp) must be used to consent each subject.

The amendment includes:

1. An additional procedure will be conducted with 50 participants to examine whether the back translation of some survey items and the originals items have the same meaning.

The amendment also does not change the IRB's previous determination to waive signed consent. Specifically, as per 45 CFR 46.117(c)(2), the IRB waived the requirement for the investigator to obtain a signed consent form for the subjects because it found that the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.

Protocol Approval Date: March 22, 2013

Amendment Approval Date: June 13, 2013

Approval is Valid Until: No Expiration Date

Please keep this Amendment Approval letter with your copy of the approved protocol.

Attachments:

1. Validated IRB-3 Amendment Review Form
2. Validated Revised Information Sheet
3. Validated Revised IRB-5